Anselmetti, F.S., Isern, A.R., Blum, P., and Betzler, C. (Eds.)
Proceedings of the Ocean Drilling Program, Scientific Results Volume 194

6. Data Report: Porosity and Permeability of Miocene Carbonate Platforms on the Marion Plateau, ODP Leg 194[1]

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ABSTRACT

We report analyses of porosity and permeability of core samples from Site 1193 in the Northern Marion Platform, Sites 1196 and 1199 in the Southern Marion Platform, and Sites 1194, 1195, 1197, and 1198 from the slopes of these platforms. The samples include 415 horizontal 1-in plugs, 290 vertical 1-in plugs, and 23 whole-core pieces. Porosity and permeability analyses were possible for most, but not all, samples. Grain density measurements were also obtained for the horizontal plugs. Representative photomicrographs are provided of thin sections from 139 of the horizontal plugs and the 23 whole-core pieces.

INTRODUCTION

Two platform to slope transects were drilled across the Miocene carbonate platforms of the Marion Plateau during Ocean Drilling Program (ODP) Leg 194. Seismic, lithologic, logging, and biostratigraphic data reveal that platform architecture was controlled by factors including sea level change, bottom currents, and biological assemblages (Isern, Anselmetti, Blum, et al., 2002). Pore water geochemical profiles through Leg 194 sediments provide evidence of present-day seawater circulation through the carbonate platforms and proximal slope sediments (Isern et al., 2002). Extensive dolomitization within both platforms also indi-

[1]Ehrenberg, S.N., Eberli, G.P., and Bracco Gartner, G.L., 2004. Data report: Porosity and permeability of Miocene carbonate platforms on the Marion Plateau, ODP Leg 194. *In* Anselmetti, F.S., Isern, A.R., Blum, P., and Betzler, C. (Eds.), *Proc. ODP, Sci. Results,* 194, 1–217 [Online]. Available from World Wide Web: <http://www-odp.tamu.edu/publications/194_SR/VOLUME/CHAPTERS/007.PDF>. [Cited YYYY-MM-DD]
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Initial receipt: 27 August 2003
Acceptance: 3 March 2004
Web publication: 20 July 2004
Ms 194SR-007

cates past fluid circulation, as required to deliver the magnesium necessary for conversion of the precursor calcium carbonate sediments. Indeed, the lithification and development of the present seismic properties of the Marion Plateau strata must to a large degree reflect the history of pore water flow attending and following burial below the sediment/water interface.

Research on the above themes should benefit from availability of the comprehensive data set of porosity and permeability measurements provided in this report. These data include both the Northern and Southern Marion Platforms and their slopes. As far as we are aware, such a data set is unique in the history of ODP and the Deep Sea Drilling Program, where issues related to "reservoir quality," traditionally the domain of the petroleum industry, have not previously been prioritized. Because of the broad interest of carbonate platform research for both academic and applied science, however, the present porosity-permeability data set is expected to have similarly broad significance and value.

METHODS

Plug samples of 1 in diameter and varying length (Tables **T1, T2**) were drilled from the working half of slabbed cores on board the *JOIDES Resolution*. Horizontal plugs were selected by S. Ehrenberg, and vertical plugs were selected by G. Eberli for their respective research projects. A further 23 whole-core samples were selected by S. Ehrenberg from Site 1196 and 1199 cores (Table **T3**). Sampling was limited to intervals with sufficient recovery of core having a coherent state of preservation suitable for drilling of a plug sample. Efforts were made to collect both horizontal and vertical plugs from nearby depths in as many places as possible, but many intervals were suitable for drilling only a single plug sample.

Plug samples from the platform top sites were analyzed at Reservoir Laboratories AS, Stavanger, Norway, and whole-core samples were analyzed at Reservoir Laboratories AS (RESLAB), Trondheim, Norway. Analytical techniques are described in reports provided by Reservoir Laboratories AS (see the **"Supplementary Material"** contents list). Porosity and grain density were calculated from sample weight, grain volume measured by helium injection using a Boyle's law porosimeter, and bulk volume calculated from length and diameter measured by caliper. Permeability was calculated using Darcy's law from the pressure decrease of flowing nitrogen across the plug length (20-bar confining pressure). A total of 79 Samples from slope and basin sites were measured at Terra-Tek, Salt Lake City, Utah, USA, using the same methods as for the platform samples. Permeability values reported by RESLAB as >50,000 Md have been set equal to 50,000 mD in Tables **T1** and **T2.**

It was suspected that porosity values calculated using plug volume measured by caliper (PORC in Table **T1**) might be overestimated for a limited number of samples due to irregular plug shape. Some shape irregularities reflect poor lithification of granular limestone having little cement content, whereas other cases reflect the presence of larger vugs or rhodoliths. To evaluate the magnitude of such problems, porosity was recalculated for 46 horizontal plugs using plug volume measured by mercury displacement (PORM). The selected 46 plugs include 37 plugs with apparent shape irregularity or suspected error in PORC, 2

T1. Horizontal plug sample data, p. 14

T2. Vertical plug sample data, p. 23

T3. Whole-core sample data, p. 29

plugs missing PORC values, and 7 plugs with apparently good cylindrical shape (run as controls).

In general, PORM values are expected to be lower than "true" porosity values because the mercury will fill any indentations along plug walls larger than a certain minimum radius, and many such indentations will be part of the natural pore system of the sample. For the control samples (good cylindrical plug shape), it is assumed that PORC is equal to true porosity. These samples were measured by mercury displacement to provide an estimate of how much PORM needs to be increased to provide the best estimate of true porosity.

Plots of the results (Figs. F1, F2) show that PORC values of the control samples are roughly 7% higher than PORM (relative to PORM), with highest weighting given to the most porous samples. Based on this estimate, porosities of plugs with suspect or missing PORC values were corrected to 107% of the PORM value (except for five plugs having PORC < 107% of PORM, in which case the original PORC value was accepted). Corrected porosity values for the 34 plugs affected are shown in bold font in column "PORX" of Table T1.

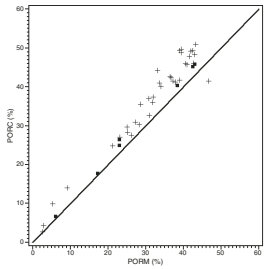
Although this correction is clearly subject to major uncertainty, it is felt that the corrected values provide a more realistic estimate of the true porosities of these plugs than the original PORC values. An alternative available to anyone wishing to use this data set is to exclude the corrected porosity values. The 34 porosity values concerned are marked in bold font in Table T1 to facilitate this alternative. However, it is not recommended to use the original, uncorrected PORC values for these 34 samples.

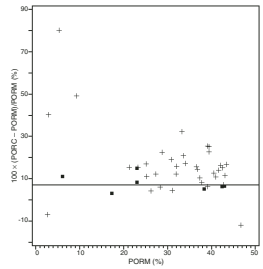
After plug analyses were completed, thin sections were prepared from 139 horizontal plugs (25 mm × 47 mm glass slides) and all 23 whole-core samples (50 mm × 75 mm glass slides). Thin sections for these horizontal plugs were made by Independent Petrographic Services (United Kingdom). Thin sections for the vertical plugs were made by Spectrum Petrographics (Winston, Oregon, USA). Thin sections of horizontal plugs and whole-core samples were impregnated with blue epoxy and polished, and part of the area was stained for carbonate mineral identification by the method of Dickson (1966). A representative area (1.0 cm × 1.5 cm) of each horizontal plug and whole-core sample thin section was photographed at standard magnification using a digital camera mounted on a Leica MZ12$_5$ stereomicroscope (see "Appendix A," p. 6, and "Appendix B," p. 7).

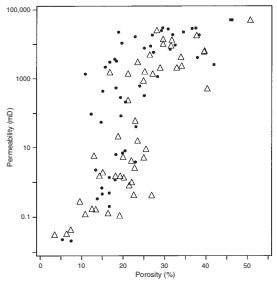
Each sample was assigned to one of three carbonate mineralogic categories: limestone (L), dolostone (D), or mixed (M) partly dolomitized limestone (Tables T1, T2, T3), based on available information. For samples where thin sections were available, petrographic examination was used to evaluate the proportions of calcite and dolomite present. Samples with a ratio of dolomite/(dolomite+calcite) of 0.2–0.8 were are assigned to the "mixed" category. Samples for which thin sections were not available were assigned a mineralogic category based on the shipboard core descriptions and X-ray diffraction data, together with macroscopic examination of the sample.

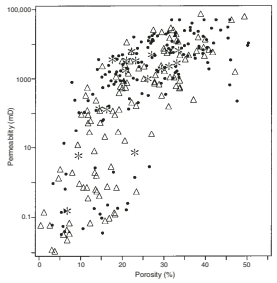
DATA

The data are tabulated in Tables T1, T2, and T3 and plotted in Figures F3, F4, F5, and F6. Most of the data are from the platform top sites, Site 1193 on the Northern Marion Platform, and Sites 1196 and 1199





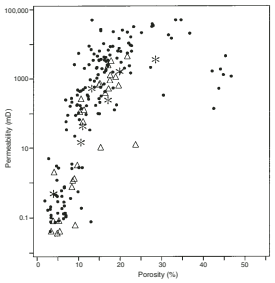


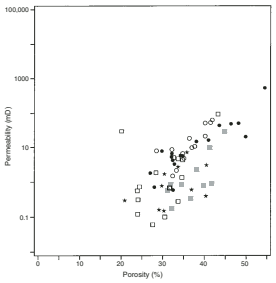


on the Southern Marion Platform (SMP). Lithologies include dolostones and limestones, as well as a few samples rich in quartz and glauconite grains (Tables T1, T2, T3). The lithologies of the slope sites (Sites 1193, 1194, 1195, 1197, and 1198) are very fine grained limestones with subordinate siliciclastic content. The platform samples display wide ranges of porosity and permeability, with some samples having permeability >50 D. Each platform site displays a unique pattern of porosity-permeability correlation. For example, at Site 1196 on the SMP the permeability varies widely at any given porosity, whereas at Site 1199, which is only 5 km away, the permeabilities have a much narrower range for given porosity (Figs. F4, F5). The slope sites generally have lower permeability for given porosity, as expected for their very fine grained textures (Fig. F6).

ACKNOWLEDGMENTS

Samples used were provided by the Ocean Drilling Program (ODP). ODP is sponsored by the U.S. National Science Foundation (NSF) and participating countries under management of Joint Oceanographic Institutions (JOI), Inc. Travel costs for SNE participation in Leg 194 were paid by the Norwegian Research Council. Costs for SNE time, analyses performed by Reservoir Laboratories AS, and preparation of thin sections of horizontal plugs and whole-core samples were paid by Statoil. Porosity and permeability measurements of slope samples and research costs for GPE and GLBG were paid from U.S. Science Support Program grants 668372 and 660387.





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Isern, A.R., Anselmetti, F.S., Blum, P., et al., 2002. *Proc. ODP, Init. Repts.,* 194 [CD-ROM]. Available from: Ocean Drilling Program, Texas A&M University, College Station TX 77845-9547, USA.

APPENDIX A

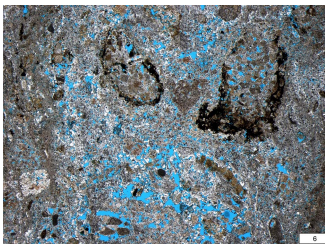
Photomicrographs of Horizontal Plugs

Photomicrographs were taken of horizontal plug samples chosen for thin sectioning (Pl. AP1).

Each photomicrograph was taken at the same scale (~1.0 cm × ~1.5 cm area).

The photomicrographs are identified by the plug number shown at lower left on each photomicrograph. Thus, the first photomicrograph has the plug number 6 and corresponds to the sample having Code = EHRE and plug number 6 (Site 1193, depth = 157.27 mbsf) in Table T1, p. 14.

AP1. Horizontal plug samples, p. 30.



APPENDIX B

Photomicrographs of Whole-Core Samples

Photomicrographs were taken of whole-core samples chosen for thin sectioning (Pl. AP2).

All photomicrographs were taken at same scale (~1.0 cm × ~1.5 cm area).

The photomicrographs are identified by the plug number printed at lower left on each photomicrograph. Thus, the first photomicrograph has the plug number W1 and corresponds to the sample having Code = EHWR (Site 1196, depth = 38.58 mbsf) in Table T3, p. 29.

Two areas were photographed on each thin section (50 mm × 75 mm glass slides) to provide an impression of the textural heterogeneity within each sample.

AP2. Whole-core samples, p. 171.

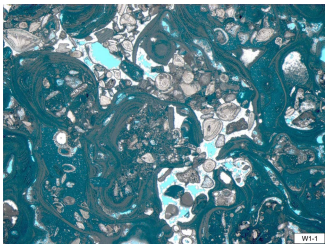


Figure F1. Plot of PORC (porosity using plug volume measured by caliper) vs. PORM (porosity using plug volume measured by mercury displacement). Only in one case (plug 244; Table T1, p. 14) is PORC substantially less than PORM, apparently reflecting an exceptional error in this particular PORC measurement. "Control" plugs selected for good cylindrical shape are represented by solid squares.

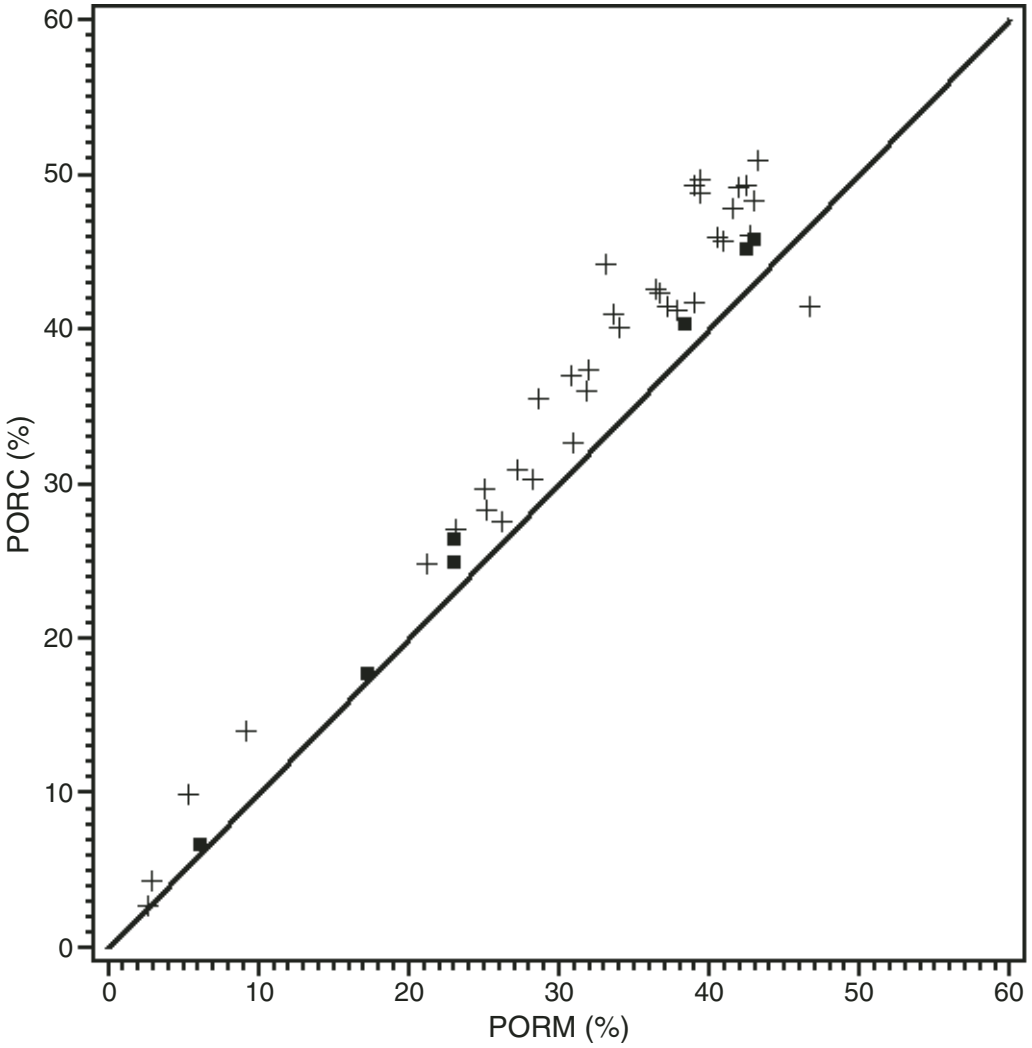


Figure F2. Plot of 100 × (PORC – PORM)/PORM vs. PORM, where PORC = porosity using plug volume measured by caliper and PORM = porosity using plug volume measured by mercury displacement. The value 100 × (PORC – PORM)/PORM represents the percentage of PORM by which the PORC value exceeds PORM. The value of 7% (horizontal line) is judged to be a suitable approximation of the average correction necessary to increase PORM of the "control" samples (plugs selected with apparently regular cylindrical shape) to best match PORC. "Control" plugs selected for good cylindrical shape are represented by solid squares.

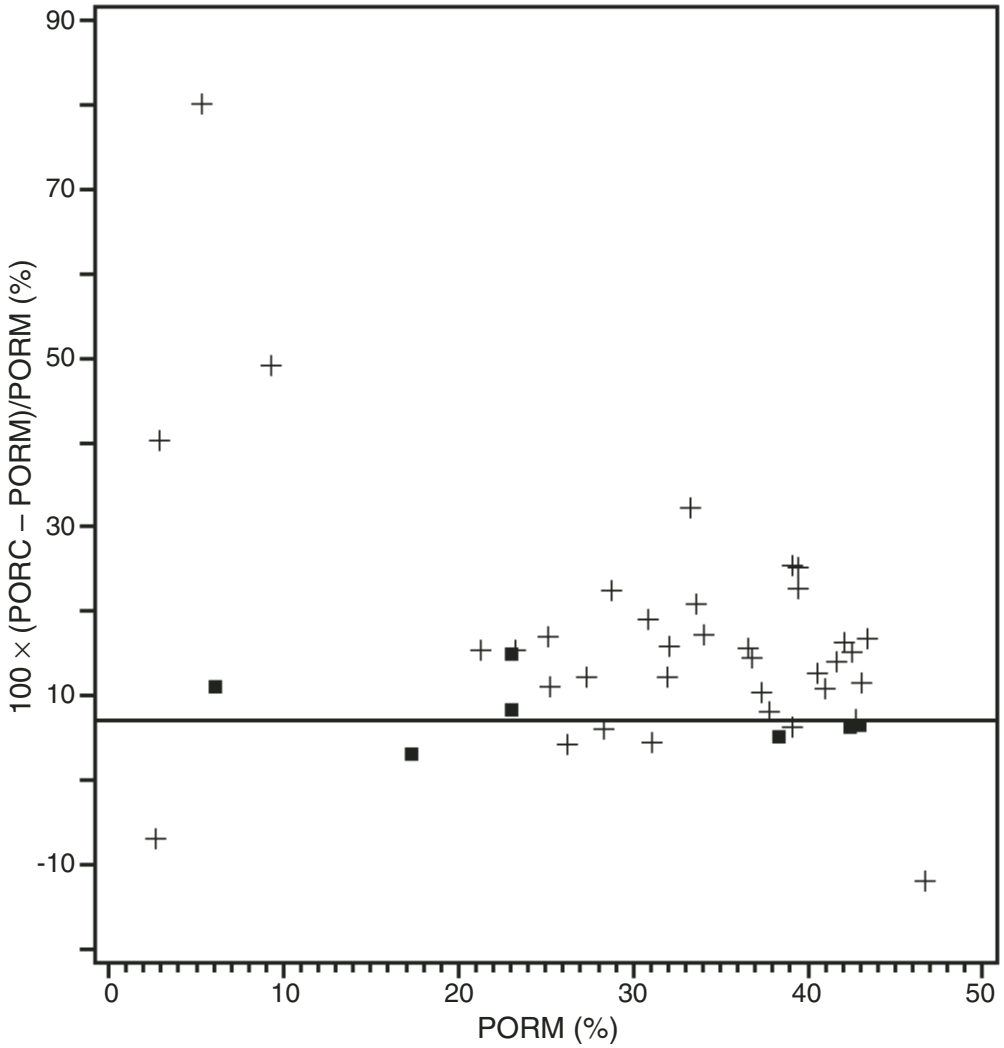


Figure F3. Klinkenberg-corrected gas permeability vs. porosity for plugs from Site 1193. Solid circles = horizontal plugs (EHRE samples), triangles = vertical plugs (BRAG samples).

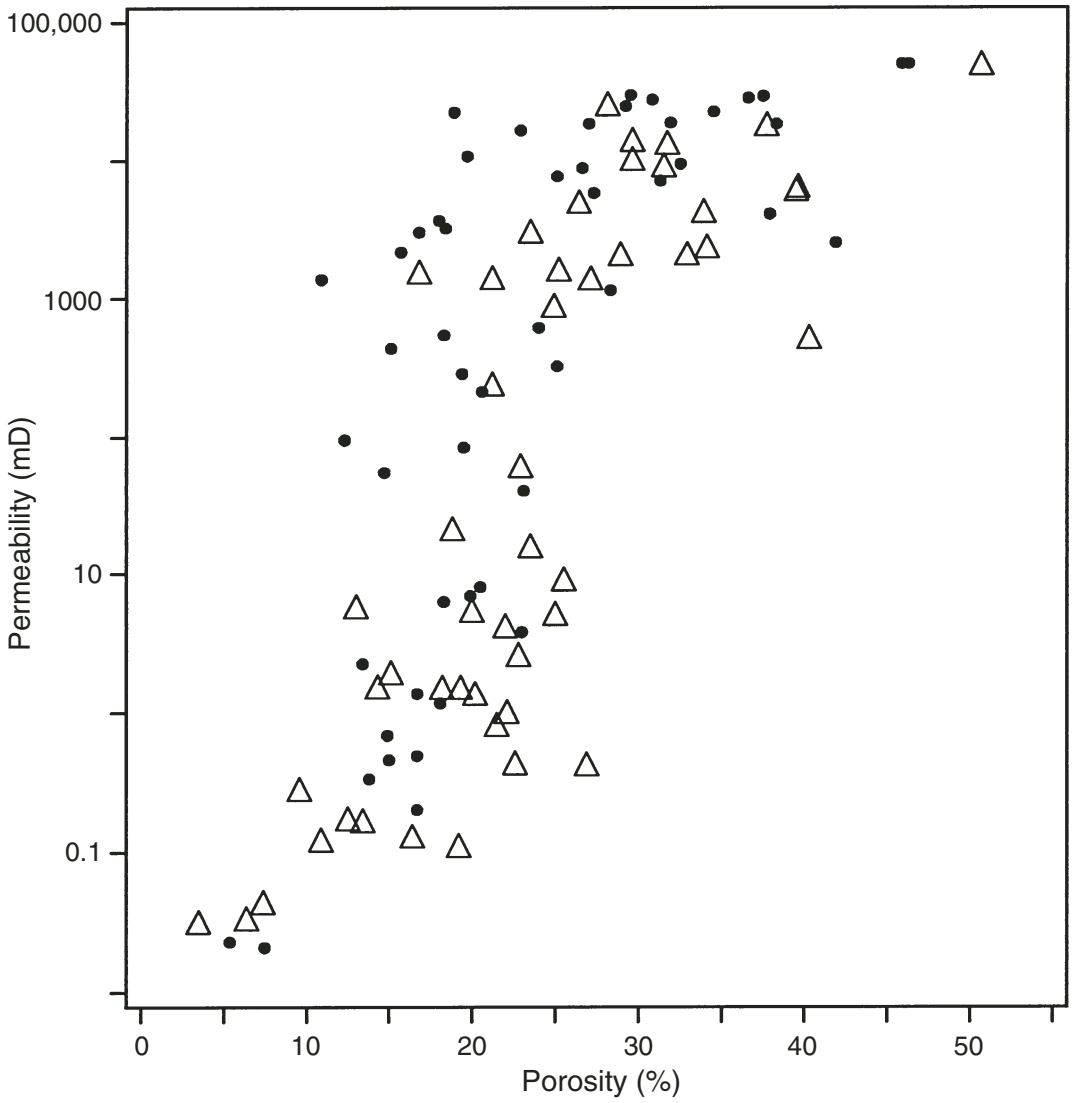


Figure F4. Klinkenberg-corrected gas permeability vs. porosity for plugs from Site 1196. Solid circles = horizontal plugs (EHRE samples), triangles = vertical plugs (BRAG samples), stars = whole-core (EHWR samples).

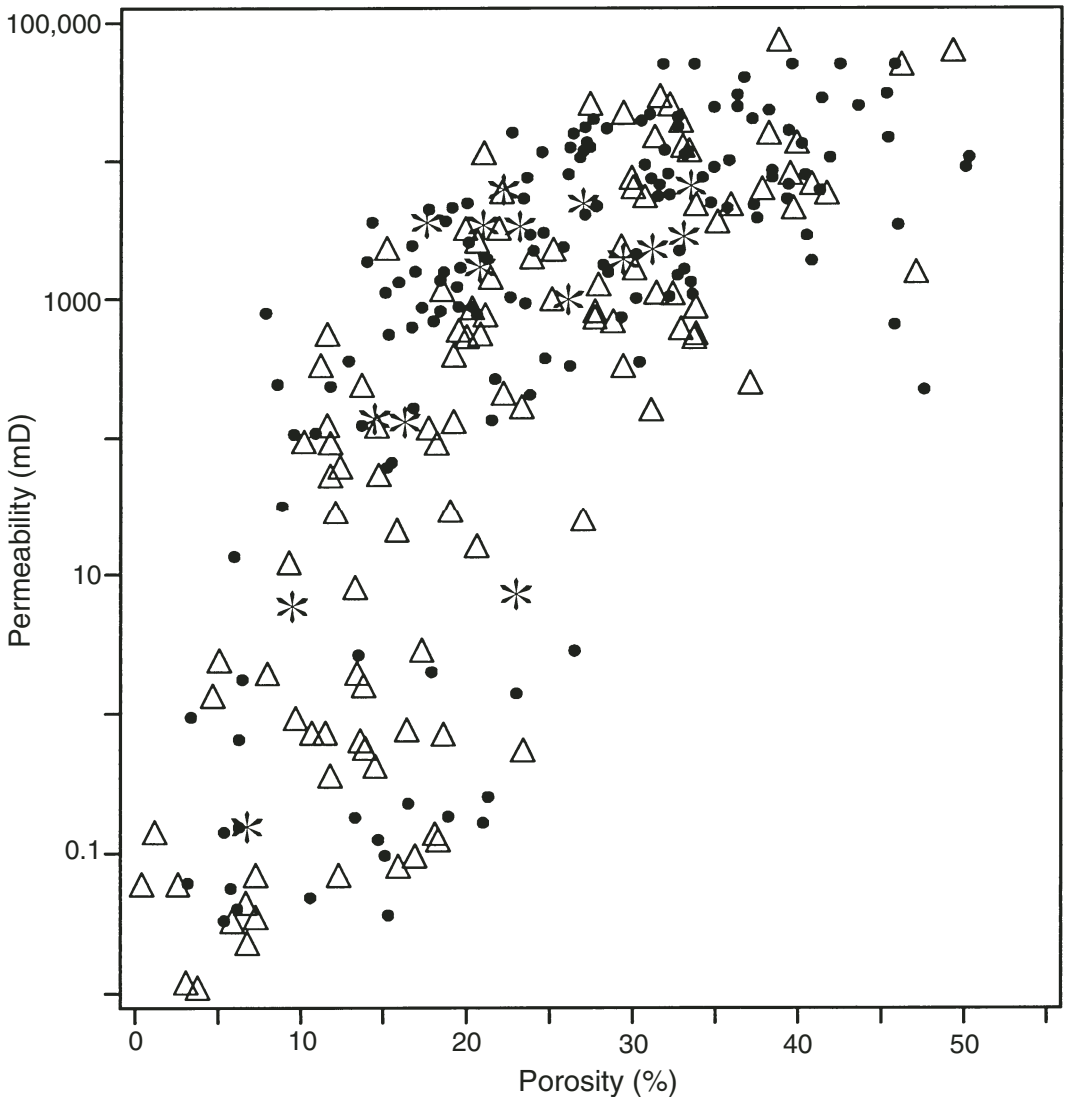


Figure F5. Klinkenberg-corrected gas permeability vs. porosity for plugs from Site 1199. Solid circles = horizontal plugs (EHRE samples), triangles = vertical plugs (BRAG samples), stars = whole-core (EHWR samples).

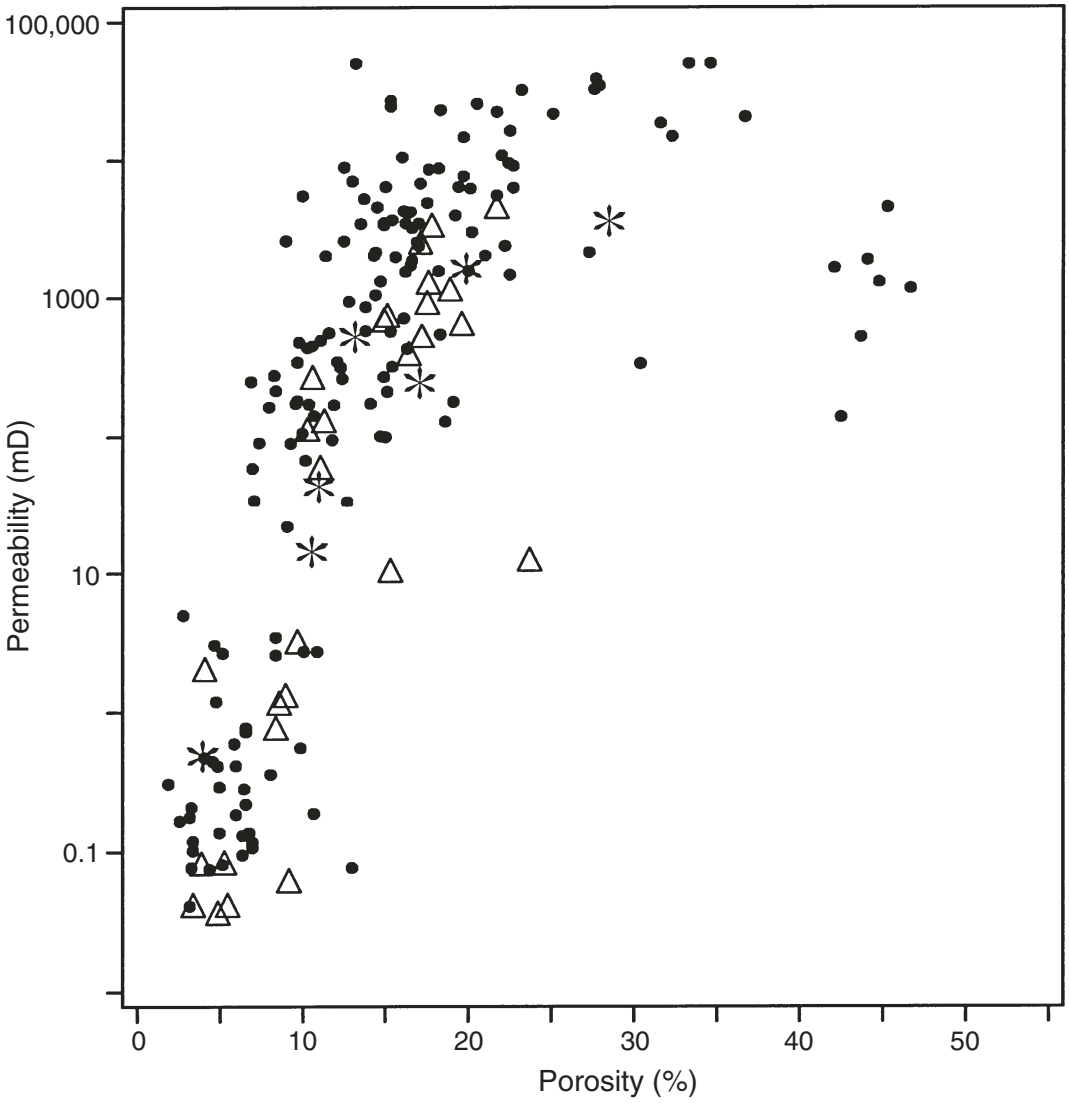


Figure F6. Permeability vs. porosity of samples from slope sites. Open circles = Site 1193, solid circles = Site 1194, shaded squares = Site 1195, open squares = Site 1197, stars = Site 1198.

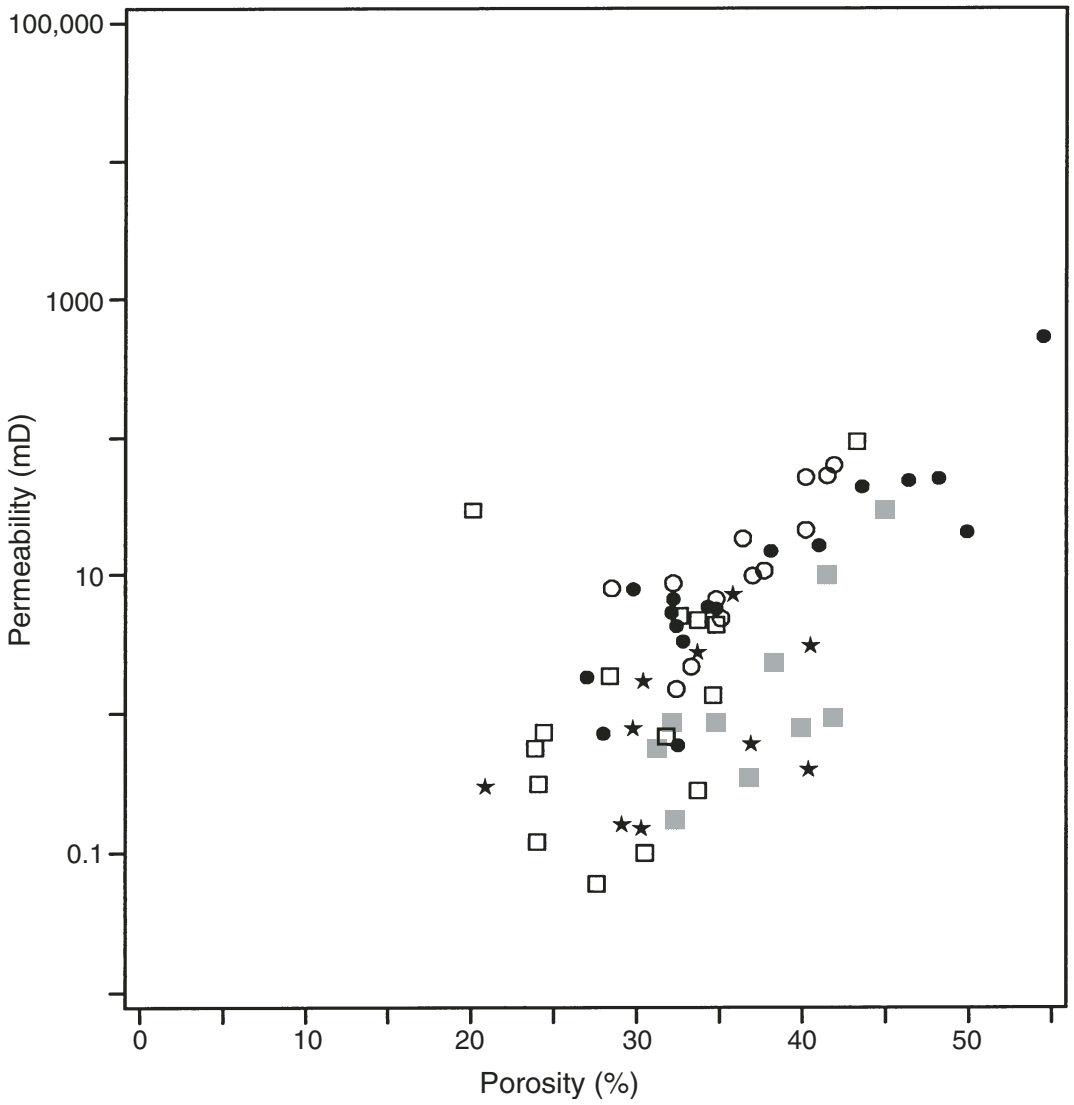


Table T1. Horizontal plug sample data. (**See table notes.** Continued on next eight pages.)

Code	Site	Hole	Depth (mbsf)	Core	Section	Top interval (cm)	Plug	TS	Mineralogy	Porosity (%)			XX	Gas permeability		Grain density (g/cm^3)	Grain volume (cm^3)	Length (cm)	Diameter (cm)
										PORC	PORM	PORX		(mD)	corrected* (mD)				
EHRE	1193	A	41.96	7	1	6	1		L	31.9		31.9		19,056.000	18,743.000	2.71	6.80	1.97	2.54
EHRE	1193	A	42.16	7	1	26	2		L	18.9		18.9		22,662.000	22,314.000	2.70	9.66	2.37	2.53
EHRE	1193	A	42.49	7	1	59	3		L	13.4		13.4		2.980	2.260	2.68	8.80	2.02	2.53
EHRE	1193	A	43.19	7	1	129	4		L	15.7		15.7		2,253.000	2,169.000	2.68	9.07	2.14	2.53
EHRE	1193	A	43.32	7	1	142	5		L	15.1		15.1		468.000	437.000	2.69	10.20	2.39	2.53
EHRE	1193	A	157.27	29	1	27	6	x	D	14.7		14.7		63.500	55.600	2.79	9.52	2.22	2.53
EHRE	1193	A	157.65	29	1	65	7	x	D	31.3		31.3		7,312.000	7,139.000	2.80	7.49	2.17	2.53
EHRE	1193	B	35.27	1	1	27	8	x	L	7.5		7.5		0.038	0.021	2.71	11.02	2.41	2.51
EHRE	1193	B	35.71	1	1	71	9	x	L	12.3		12.3		107.000	95.700	2.72	10.67	2.42	2.53
EHRE	1193	B	36.17	1	1	117	10	x	L	31.1	27.6	**29.5**	X	30,081.000	29,666.000	2.70	9.24	2.67	2.53
EHRE	1193	B	36.45	1	1	145	11	x	L	19.9		19.9		8.470	6.950	2.69	9.75	2.42	2.53
EHRE	1193	B	36.65	1	2	15	12	x	L	19.7		19.7		10,974.000	10,751.000	2.71	8.76	2.17	2.53
EHRE	1193	B	37.12	1	2	62	13	x	L	45.9	43.0	45.9	O	50,000.000	50,000.000	2.73	6.69	2.46	2.53
EHRE	1193	B	37.40	1	2	90	14	x	L	16.7		16.7		1.950	1.380	2.70	11.01	2.63	2.53
EHRE	1193	B	44.63	2	1	23	15	x	L	14.9		14.9		1.020	0.692	2.69	11.17	2.61	2.53
EHRE	1193	B	45.26	2	1	86	16	x	L	24.0		24.0		654.000	616.000	2.70	10.31	2.70	2.53
EHRE	1193	B	45.69	2	1	129	17		L	25.1		25.1		351.000	325.000	2.72	8.84	2.35	2.53
EHRE	1193	B	45.97	2	2	15	18		L	20.6		20.6		233.000	213.000	2.71	9.10	2.28	2.53
EHRE	1193	B	46.48	2	2	66	19	x	L	22.9		22.9		16,836.000	16,546.000	2.70	7.76	2.02	2.52
EHRE	1193	B	63.21	5	1	1	20		L	37.9		37.9		4,234.000	4,110.000	2.73	7.08	2.27	2.53
EHRE	1193	B	63.74	5	1	54	21	x	L	26.6	23.1	26.6	O	9,033.000	8,835.000	2.71	9.56	2.59	2.53
EHRE	1193	B	67.92	6	1	2	22	x	L	18.1		18.1		1.680	1.180	2.72	10.25	2.49	2.52
EHRE	1193	B	68.06	6	1	16	23		L							2.72	6.82		
EHRE	1193	B	68.26	6	1	36	24	x	L	36.6		36.6		28,693.000	28,290.000	2.72	7.49	2.37	2.52
EHRE	1193	B	68.41	6	1	51	25	x	L	29.1		29.1		7.96	6.55	2.72	8.48	2.38	2.53
EHRE	1193	B	68.84	6	1	94	26	x	L	18.4		18.4		6.61	5.44	2.72	10.34	2.52	2.53
EHRE	1193	B	69.11	6	1	121	27	x	L	29.2		29.2		25,085.000	24,714.000	2.69	9.32	2.62	2.53
EHRE	1193	B	73.32	8	1	12	28	x	L	25.1	23.1	25.1	O	7,877.000	7,696.000	2.70	9.86	2.62	2.53
EHRE	1193	B	73.55	8	1	35	29	x	L	23.1		23.1		47.400	41.100	2.72	10.32	2.67	2.53
EHRE	1193	B	73.79	8	1	59	30		L	18.4		18.4		3,343.000	3,236.000	2.70	12.44	3.01	2.54
EHRE	1193	B	74.16	8	1	96	31	x	L	48.4	43.3	**46.3**	X	50,000.000	50,000.000	2.70	6.66	2.63	2.50
EHRE	1193	B	86.89	11	1	59	32	x	L	36.2	32.2	**34.5**	X	22,856.000	22,505.000	2.71	7.23	2.29	2.51
EHRE	1193	B	87.45	11	1	115	33		L	18.0		18.0		3,800.000	3,684.000	2.71	9.11	2.21	2.53
EHRE	1193	B	87.61	11	1	131	34	x	L	16.7		16.7		0.318	0.202	2.70	11.89	2.84	2.53
EHRE	1193	B	91.02	12	1	2	35	x	L	16.7		16.7		0.740	0.494	2.71	11.98	2.86	2.53
EHRE	1193	B	91.56	12	1	56	36		L	28.3		28.3		1,205.000	1,148.000	2.71	6.45	1.79	2.53
EHRE	1193	B	91.71	12	1	71	37	x	L	37.5		37.5		29,565.000	29,154.000	2.71	7.29	2.32	2.53
EHRE	1193	B	100.44	14	1	4	38	x	D	28.4	25.5	**27.3**	X	5,982.000	5,829.000	2.82	8.28	2.30	2.53
EHRE	1193	B	114.86	17	1	36	39	x	M	41.9	39.3	41.9	X	2,636.000	2,544.000	2.78	7.25	2.52	2.51
EHRE	1193	B	128.70	20	1	10	40	x	D	32.5		32.5		9,669.000	9,462.000	2.80	8.21	2.40	2.54
EHRE	1193	B	129.03	20	1	43	41	x	D	38.3		38.3		18,695.000	18,385.000	2.81	8.90	2.87	2.53
EHRE	1193	C	35.07	1	1	7	42	x	L	5.4		5.4		0.041	0.023	2.69	11.13	2.34	2.53
EHRE	1193	C	35.27	1	1	27	43	x	L	15.0		15.0		0.693	0.461	2.71	9.49	2.22	2.53
EHRE	1193	C	35.64	1	1	64	44	x	L	30.8		30.8		27,853.000	27,457.000	2.72	7.69	2.21	2.53
EHRE	1193	C	36.22	1	1	122	45	x	L	13.8		13.8		0.514	0.336	2.72	9.92	2.29	2.53
EHRE	1193	C	36.72	1	2	37	46	x	L	18.3		18.3		581.000	545.000	2.72	7.15	1.74	2.53
EHRE	1193	C	37.44	1	2	109	47	x	L	10.9		10.9		1,440.000	1,376.000	2.70	8.87	1.98	2.53
EHRE	1193	C	44.63	2	1	23	48	x	L	16.8		16.8		3,130.000	3,027.000	2.71	9.45	2.26	2.53

Table T1 (continued).

Code	Site	Hole	Depth (mbsf)	Core	Section	Top interval (cm)	Plug	TS	Mineralogy	Porosity (%)			XX	Gas permeability		Grain density (g/cm³)	Grain volume (cm³)	Length (cm)	Diameter (cm)
										PORC	PORM	PORX		(mD)	corrected* (mD)				
EHRE	1193	C	45.18	2	1	78	49		L	20.5		20.5		9.740	8.050	2.71	9.83	2.46	2.53
EHRE	1193	C	51.63	3	1	23	**50**	x	L	23.0		23.0		3.060	3.820	2.70	7.24	1.87	2.53
EHRE	1193	C	60.96	4	1	36	**51**	x	L	15.6		15.6		103.000	91.7	2.72	8.83	2.08	2.53
EHRE	1193	C	61.34	4	1	74	52		L	18.3		18.3		7.800	6.310	2.72	7.56	1.84	2.53
EHRE	1193	C	61.75	4	1	115	**53**	x	L	19.4		19.4		311.000	287.000	2.71	8.10	2.00	2.53
EHRE	1193	C	62.18	4	2	11	**54**	x	L	27.0		27.0		18,757.000	18,447.000	2.72	6.68	1.82	2.53
EHRE	1193	C	62.71	4	2	64	**55**	x	L	19.5		19.5		95.400	84.600	2.71	7.12	1.76	2.53
EHRE	1196	A	10.19	2	1	59	**56**	x	D	41.4		41.4		28,839.000	28,435.000	2.81	5.89	2.00	2.53
EHRE	1196	A	19.00	3	1	10	**57**	x	D	45.8		45.8		696.000	656.000	2.80	5.01	1.90	2.49
EHRE	1196	A	28.61	4	1	11	58		L	50.1		50.1		9,284.000	9,083.000	2.81	5.17	2.06	2.53
EHRE	1196	A	28.99	4	1	49	59		L							2.74	5.89		
EHRE	1196	A	29.30	4	1	80	60		L	31.1		31.1		1.57	1.10	2.71	7.76	2.24	2.53
EHRE	1196	A	29.49	4	1	99	**61**	x	L	26.5		26.5		3.570	2.840	2.71	8.86	2.38	2.54
EHRE	1196	A	38.44	5	1	24	**62**	x	L	16.5		16.5		0.355	0.227	2.71	10.37	2.47	2.53
EHRE	1196	A	39.10	5	1	90	**63**	x	L	41.3		41.3		6,366.000	6,207.000	2.74	7.20	2.44	2.53
EHRE	1196	A	39.57	5	1	137	64		L	30.4		30.4		378.000	351.000	2.74	7.49	2.14	2.53
EHRE	1196	A	40.10	5	2	40	65		L	40.5	38.4	40.5	O	3,005.000	2,905.000	2.74	7.33	2.45	2.53
EHRE	1196	A	47.61	6	1	11	66		D	4.7	35.9	**38.4**	X	8,757.000	8,563.000	2.79	6.89	2.30	2.53
EHRE	1196	A	48.13	6	1	63	67		D	31.6		31.6		6,920.000	6,752.000	2.82	7.91	2.30	2.53
EHRE	1196	A	48.73	6	1	123	68		D	35.7		35.7		4,698.000	4,566.000	2.82	6.89	2.13	2.53
EHRE	1196	A	56.97	7	1	7	69		D	30.2		30.2		1,067.000	1,014.000	2.82	8.24	2.35	2.53
EHRE	1196	A	57.47	7	1	57	70		D	34.9		34.9		24,751.000	24,383.000	2.82	6.78	2.14	2.49
EHRE	1196	A	58.27	7	1	137	71		D	26.2		26.2		355.000	329.000	2.81	9.06	2.44	2.53
EHRE	1196	A	58.37	7	2	6	**72**	x	D	32.7		32.7		1,559.000	1,492.000	2.82	7.92	2.34	2.53
EHRE	1196	A	59.04	7	2	73	73		D	38.4		38.4		7,798.000	7,617.000	2.80	6.41	2.07	2.53
EHRE	1196	A	59.31	7	2	100	74		D	42.7	36.8	**39.4**	X	6,953.000	6,784.000	2.82	6.51	2.26	2.53
EHRE	1196	A	66.52	8	1	2	75		D	17.7		17.7		4,611.000	4,481.000	2.79	6.98	2.21	2.53
EHRE	1196	A	76.28	9	1	18	76		D	33.6		33.6		1,143.000	1,088.000	2.81	7.78	2.33	2.53
EHRE	1196	A	76.69	9	1	59	**77**	x	D	26.1		26.1		50.2	43.6	2.77	8.17	2.20	2.53
EHRE	1196	A	77.22	9	1	112	78		D	34.7		34.7		5,131.000	4,992.000	2.81	7.32	2.23	2.53
EHRE	1196	A	77.76	9	2	24	79		D	37.3		37.3		4,959.000	4,823.000	2.82	6.68	2.12	2.53
EHRE	1196	A	78.17	9	2	65	**80**	x	D	41.9		41.9		10,854.000	10,633.000	2.82	5.69	1.95	2.53
EHRE	1196	A	105.40	12	1	40	**81**	x	D	41.6	37.6	**40.2**	X	13,598.000	13,343.000	2.82	6.78	2.31	2.53
EHRE	1196	A	105.76	12	1	76	82		D	37.5		37.5		3,995.000	3,875.000	2.81	6.56	2.07	2.54
EHRE	1196	A	115.28	13	1	58	83		D	34.2		34.2		7,804.000	7,623.000	2.81	6.94	2.08	2.54
EHRE	1196	A	115.74	13	1	104	**84**	x	D	32.2		32.2		1,098.000	1,045.000	2.80	7.97	2.34	2.53
EHRE	1196	A	116.09	13	1	139	85		D	39.4		39.4		16,927.000	16,635.000	2.80	6.56	2.12	2.55
EHRE	1196	A	116.24	13	2	4	86		D	32.2		32.2		5,863.000	5,712.000	2.82	7.18	2.09	2.54
EHRE	1196	A	116.40	13	2	20	**87**	x	D	34.9		34.9		9,206.000	9,006.000	2.82	7.40	2.26	2.53
EHRE	1196	A	124.54	14	1	24	**88**	x	D	18.4		18.4		867.000	821.000	2.83	9.76	2.38	2.53
EHRE	1196	A	125.66	14	1	136	**89**	x	D	11.4		11.4		1.09	0.741	2.79	10.74	2.41	2.53
EHRE	1196	A	125.71	14	2	1	**90**	x	D	14.4		14.4		25.2	21.4	2.78	10.85	2.56	2.51
EHRE	1196	A	162.87	18	1	17	**91**	x	D	15.5		15.5		75.300	66.400	2.81	10.32	2.55	2.47
EHRE	1196	A	163.30	18	1	60	**92**		D	30.7		30.7		9,592.000	9,386.000	2.82	8.27	2.45	2.49
EHRE	1196	A	163.90	18	1	120	**93**	x	D	49.4	42.8	**45.8**	X	50,000.000	50,000.000	2.80	6.18	2.51	2.49
EHRE	1196	A	164.46	18	2	30	**94**	x	D	21.5		21.5		148.000	134.000	2.83	9.47	2.40	2.53
EHRE	1196	A	164.81	18	2	65	95		D	24.7		24.7		401.000	373.000	2.84	8.66	2.42	2.46
EHRE	1196	A	165.00	18	2	84	**96**	x	D	38.2		38.2		23,593.000	23,235.000	2.82	7.28	2.40	2.50

Table T1 (continued).

Code	Site	Hole	Depth (mbsf)	Core	Section	Top interval (cm)	Plug	TS	Mineralogy	Porosity (%)				Gas permeability		Grain density (g/cm³)	Grain volume (cm³)	Length (cm)	Diameter (cm)
										PORC	PORM	PORX	XX	(mD)	corrected* (mD)				
EHRE	1196	A	166.22	18	3	56	97		D										
EHRE	1196	A	166.62	18	3	96	98		D	32.1		32.1		8,266.000	8,079.000	2.80	5.50	1.69	2.47
EHRE	1196	A	172.44	19	1	14	**99**	x	D	23.4		23.4		5,512.000	5,366.000	2.82	7.97	2.12	2.50
EHRE	1196	A	173.23	19	1	93	100		D	15.1		15.1		1,174.000	1,118.000	2.76	9.14	2.23	2.48
EHRE	1196	A	173.70	19	1	140	101		D	31.9		31.9		12,243.000	12,004.000	2.81	7.18	2.20	2.47
EHRE	1196	A	174.05	19	2	32	102		D		28.2	**30.2**	+	2,192.000	2,110.000	2.79	5.72		
EHRE	1196	A	174.46	19	2	73	**103**	x	D	45.3	42.5	45.3	O	31,125.000	30,701.000	2.81	6.63	2.43	2.52
EHRE	1196	A	174.63	19	2	90	104		D	45.4		45.4		15,061.000	14,790.000	2.82	5.44	2.24	2.38
EHRE	1196	A	174.87	19	2	114	105		D	33.1		33.1		1,723.000	1,652.000	2.81	7.57	2.46	2.42
EHRE	1196	A	175.68	19	3	48	106		D	23.8		23.8		3,028.000	2,927.000	2.79	8.75	2.32	2.51
EHRE	1196	A	182.96	20	1	106	**107**	x	L	21.0		21.0		0.263	0.165	2.72	6.98	1.83	2.48
EHRE	1196	A	191.62	21	1	12	**108**	x	L	17.9	17.3	17.9	O	2.590	2.000	2.70	8.59	2.20	2.46
EHRE	1196	A	191.92	21	1	42	109		L							2.73	6.03		
EHRE	1196	A	201.49	22	1	39	**110**	x	L	10.6		10.6		0.081	0.048	2.73	9.86	2.46	2.39
EHRE	1196	A	307.22	33	1	32	**111**	x	L	14.7		14.7		0.202	0.125	2.71	9.54	2.28	2.50
EHRE	1196	A	308.31	33	1	141	**112**	x	L	5.4		5.4		0.057	0.033	2.60	11.70	2.52	2.50
EHRE	1196	A	308.66	33	2	30	**113**	x	L	6.3		6.3		0.245	0.153	2.60	9.80	2.20	2.46
EHRE	1196	A	316.86	34	1	26	114		L	13.3		13.3		0.286	0.180	2.71	10.37	2.38	2.53
EHRE	1196	A	317.43	34	1	83	**115**	x	L	47.6		47.6		244.000	224.000	2.72	6.32	2.40	2.53
EHRE	1196	A	336.00	36	1	10	**116**	x	L		17.7	**18.9**	+	0.290	0.183	2.71	9.64		
EHRE	1196	A	412.82	44	1	12	117		D	44.4	33.5	**35.8**	X	10,317.000	10,102.000	2.83	5.65	2.02	2.53
EHRE	1196	A	413.10	44	1	40	**118**	x	D	41.1	33.9	**36.3**	X	25,037.000	24,666.000	2.81	7.52	2.60	2.50
EHRE	1196	A	413.65	44	1	95	**119**	x	D	32.7		32.7		21,133.000	20,799.000	2.81	8.23	2.45	2.52
EHRE	1196	A	480.19	51	1	19	**120**	x	D	10.1	5.6	**6.0**	X	16.200	13.500	2.83	10.15	2.30	2.50
EHRE	1196	A	481.60	51	2	12	**121**	x	D	5.8		5.8		0.096	0.056	2.74	11.00	2.38	2.50
EHRE	1196	A	482.02	51	2	54	122		D	6.3		6.3		0.964	0.654	2.77	12.43	2.68	2.51
EHRE	1196	A	483.07	51	3	11	123		D	11.3		11.3		4.94	4.03	2.76	11.67	2.66	2.51
EHRE	1196	A	483.93	51	3	97	124		D	12.6		12.6		5.33	4.38	2.80	10.90	2.50	2.52
EHRE	1196	A	484.58	51	4	21	125		D	12.9		12.9		385.000	358.000	2.82	10.55	2.39	2.54
EHRE	1196	A	490.21	52	1	51	126		D	6.8	6.1	**6.5**	O	2.300	1.760	2.76	12.28	2.60	2.54
EHRE	1196	A	490.80	52	1	110	127		D	9.8		9.8		48.300	42.0	2.80	12.02	2.65	2.53
EHRE	1196	A	491.22	52	2	5	**128**	x	D	16.9		16.9		1,656.000	1,587.000	2.82	10.36	2.48	2.53
EHRE	1196	A	491.92	52	2	75	**129**	x	D	12.9		12.9		85.7	76.0	2.78	11.64	2.66	2.53
EHRE	1196	A	492.32	52	2	115	130		D	14.0		14.0		1,948.000	1,872.000	2.81	11.15	2.58	2.53
EHRE	1196	A	492.96	52	3	29	131		D	3.4		3.4		1.370	0.947	2.76	9.86	2.03	2.53
EHRE	1196	A	493.20	52	3	53	132		D	3.6		3.6		0.135	0.082	2.73	11.38	2.35	2.53
EHRE	1196	A	493.81	52	3	114	133		D	7.9		7.9		43.0	37.1	2.78	10.56	2.28	2.53
EHRE	1196	A	494.31	52	4	17	134		D	7.7		7.7		18.4	15.5	2.76	10.99	2.37	2.53
EHRE	1196	A	495.01	52	4	87	135		D	8.6		8.6		264.000	243.000	2.81	11.49	2.50	2.53
EHRE	1196	A	496.11	52	5	47	136		D	4.9		4.9		2.19	1.67	2.75	11.23	2.35	2.53
EHRE	1196	A	496.34	52	5	70	137		D	6.9		6.9		1.17	0.800	2.76	10.48	2.24	2.53
EHRE	1196	A	496.97	52	5	133	138		D	11.8		11.8		256.000	235.000	2.82	11.39	2.57	2.53
EHRE	1196	A	497.39	52	6	25	139		D	5.2		5.2		0.110	0.066	2.75	12.28	2.62	2.51
EHRE	1196	A	499.42	53	1	12	140		D	14.3		14.3		3,723.000	3,609.000	2.82	10.64	2.51	2.51
EHRE	1196	A	500.01	53	1	71	141		D	10.9		10.9		121.000	108.000	2.80	10.75	2.42	2.52
EHRE	1196	A	500.69	53	1	139	142		D	9.1		9.1		58.1	50.9	2.81	11.42	2.52	2.52
EHRE	1196	A	501.08	53	2	28	143		D	7.9		7.9		840.000	795.000	2.78	11.12	2.44	2.51
EHRE	1196	A	501.54	53	2	74	144		D	10.1		10.1		107.000	95.9	2.79	12.01	2.68	2.52

Table T1 (continued).

Code	Site	Hole	Depth (mbsf)	Core	Section	Top interval (cm)	Plug	TS	Mineralogy	Porosity (%)			XX	Gas permeability		Grain density (g/cm³)	Grain volume (cm³)	Length (cm)	Diameter (cm)
										PORC	PORM	PORX		(mD)	corrected* (mD)				
EHRE	1196	A	502.05	53	2	125	145		D	5.7		5.7		0.068	0.039	2.73	12.65	2.69	2.52
EHRE	1196	A	502.47	53	3	17	146		D	7.2		7.2		0.039	0.022	2.64	12.16	2.65	2.51
EHRE	1196	A	504.07	53	4	37	147		D	5.5		5.5		0.071	0.041	2.74	11.69	2.50	2.51
EHRE	1196	A	504.75	53	4	105	148		D	9.7		9.7		0.067	0.039	2.78	10.14	2.27	2.51
EHRE	1196	A	509.18	54	1	28	149		D	15.3		15.3		0.063	0.036	2.76	10.56		
EHRE	1196	A	509.80	54	1	90	150		D	8.0		8.0		2.380	1.82	2.80	11.56	2.50	2.53
EHRE	1196	A	510.12	54	1	122	151		D	5.4		5.4		0.226	0.141	2.74	11.51	2.48	2.50
EHRE	1196	A	518.75	55	1	25	**152**	x	D	28.4		28.4		17,485.000	17,187.000	2.80	8.00	2.24	2.52
EHRE	1196	A	519.14	55	1	64	153		D	6.6		6.6		49.8	43.2	2.78	10.34	2.22	2.52
EHRE	1196	A	519.57	55	1	107	154		D	15.9		15.9		1,389.000	1,327.000	2.77	10.57	2.50	2.53
EHRE	1196	A	528.55	56	1	45	155		D	27.1		27.1		17,821.000	17,520.000	2.79	10.30	2.81	2.53
EHRE	1196	A	529.66	56	2	38	156		D	8.2		8.2		6.56	5.42	2.81	12.00	2.58	2.54
EHRE	1196	A	537.97	57	1	27	**157**	x	D	8.9		8.9		36.800	31.700	2.81	11.53	2.50	2.54
EHRE	1196	A	538.41	57	1	71	158		D	33.7		33.7		50,000.000	50,000.000	2.81	8.16	2.39	2.56
EHRE	1196	A	538.92	57	1	122	159		D	15.3		15.3		592.000	556.000	2.80	11.75	2.74	2.54
EHRE	1196	A	539.35	57	2	15	160		D	6.7		6.7		0.072	0.042	2.73	12.76	2.72	2.53
EHRE	1196	A	539.42	57	2	22	161		D	13.5		13.5		3.340	2.640	2.77	10.74	2.51	2.51
EHRE	1196	A	540.69	57	3	6	162		D	15.1		15.1		0.158	0.096	2.75	10.24	2.40	2.53
EHRE	1196	A	541.15	57	3	52	163		D	7.4		7.4		0.246	0.154	2.74	10.91	2.38	2.51
EHRE	1196	A	547.46	58	1	26	164		D	16.7		16.7		667.000	628.000	2.83	9.89	2.38	2.52
EHRE	1196	A	547.89	58	1	57	**165**	x	D	8.5		8.5		0.369	0.236	2.77	11.04	2.42	2.52
EHRE	1196	A	548.46	58	1	104	166		D	7.6		7.6		1.35	0.936	2.82	11.15	2.42	2.52
EHRE	1196	A	557.51	59	1	61	167		D	31.5		31.5		5,694.000	5,545.000	2.82	9.72	2.89	2.50
EHRE	1196	A	557.93	59	1	103	**168**	x	D	33.1		33.1		11,399.000	11,171.000	2.82	8.54	2.60	2.50
EHRE	1196	A	566.61	60	1	1	169		D	37.2		37.2		20,501.000	20,174.000	2.82	7.70	2.50	2.50
EHRE	1196	A	585.91	62	1	11	**170**	x	D	24.0		24.0		2,323.000	2,237.000	2.82	9.02	2.40	2.51
EHRE	1196	A	586.18	62	1	38	171		D	17.3		17.3		918.000	871.000	2.82	9.98	2.48	2.49
EHRE	1196	A	597.22	63	2	23	172		D	26.4		26.4		16,068.000	15,786.000	2.82	10.27	2.82	2.51
EHRE	1196	A	598.10	63	2	111	173		D	18.6		18.6		1,645.000	1,576.000	2.81	9.86	2.47	2.50
EHRE	1196	A	598.19	63	2	120	174		D	18.0		18.0		736.000	694.000	2.81	11.45	2.80	2.52
EHRE	1196	A	605.23	64	1	13	**175**	x	D	42.5	37.0	**39.6**	X	50,000.000	50,000.000	2.81	7.36	2.61	2.50
EHRE	1196	A	606.42	64	1	132	176		D	21.2		21.2		2,033.000	1,954.000	2.83	11.15	2.86	2.51
EHRE	1196	A	606.88	64	2	28	177		D	30.5		30.5		19,837.000	19,516.000	2.81	8.39	2.42	2.52
EHRE	1196	A	607.72	64	2	112	178		D	13.2		13.2		84.4	74.9	2.82	11.03	2.55	2.52
EHRE	1196	A	608.36	64	3	31	179		D	24.5		24.5		11,840.000	11,606.000	2.81	10.53	2.84	2.50
EHRE	1196	A	609.19	64	3	114	180		D	16.7		16.7		2,530.000	2,440.000	2.79	10.80	2.60	2.52
EHRE	1196	A	614.78	65	1	8	181		D	26.8		26.8		10,833.000	10,612.000	2.84	10.73	2.94	2.52
EHRE	1196	A	615.65	65	1	95	182		D	27.6		27.6		20,304.000	19,978.000	2.80	9.71	2.69	2.52
EHRE	1196	A	616.46	65	2	27	183		D	18.7		18.7		3,798.000	3,682.000	2.79	10.63	2.62	2.52
EHRE	1196	A	616.62	65	2	43	**184**	x	D	31.8		31.8		50,000.000	50,000.000	2.80	8.47	2.51	2.51
EHRE	1196	A	617.36	65	2	117	**185**	x	D	3.2		3.2		0.103	0.061	2.77	12.46	2.58	2.52
EHRE	1196	A	617.68	65	3	1	**186**	x	D	1.8		1.8		0.128	0.077	2.77	11.80	2.53	2.52
EHRE	1196	A	618.67	65	3	100	187		D	7.7		7.7		1.63	1.14	2.77	12.69	2.78	2.51
EHRE	1196	A	619.65	65	4	50	188		D	20.0		20.0		5,105.000	4,966.000	2.83	10.64	2.71	2.50
EHRE	1196	A	620.47	65	4	132	189		D	18.4		18.4		1,429.000	1,366.000	2.76	10.37	2.59	2.50
EHRE	1196	A	620.90	65	5	25	**190**	x	D	6.2		6.2		0.070	0.040	2.80	12.25	2.64	2.51
EHRE	1196	A	624.45	66	1	5	191		D	27.0		27.0		12,104.000	11,867.000	2.69	9.42	2.61	2.51
EHRE	1196	A	625.62	66	1	122	**192**	x	D	19.1		19.1		4,740.000	4,607.000	2.77	11.28	2.82	2.51

Table T1 (continued).

Code	Site	Hole	Depth (mbsf)	Core	Section	Top interval (cm)	Plug	TS	Mineralogy	Porosity (%)				Gas permeability		Grain density (g/cm³)	Grain volume (cm³)	Length (cm)	Diameter (cm)
										PORC	PORM	PORX	XX	(mD)	corrected* (mD)				
EHRE	1196	A	626.15	66	2	40	193		D	10.2		10.2		20.5	17.3	2.68	11.06	2.49	2.51
EHRE	1196	A	626.83	66	2	108	194		D	16.8		16.8		181.000	164.000	2.74	11.37	2.76	2.51
EHRE	1196	A	627.32	66	3	9	195		D	19.5		19.5		929.000	881.000	2.77	11.23	2.82	2.51
EHRE	1196	A	627.97	66	3	74	**196**	x	D	22.7		22.7		16,365.000	16,079.000	2.75	9.64	2.52	2.51
EHRE	1196	A	628.55	66	3	132	197		D	22.6		22.6		1,086.000	1,033.000	2.80	7.35		
EHRE	1196	A	628.83	66	4	11	198		D	20.3		20.3		928.000	880.000	2.81	11.21		
EHRE	1196	A	629.13	66	4	41	**199**	x	D	9.5		9.5		0.196	0.121	2.75	11.56	2.58	2.51
EHRE	1196	A	629.58	66	4	86	**200**	x	D	23.8		23.8		223.000	204.000	2.81	9.24	2.45	2.51
EHRE	1196	A	633.88	67	1	18	201		D	14.5		14.5		14.9	12.6	2.76	10.24	2.42	2.51
EHRE	1196	A	634.46	67	1	76	202		D	19.6		19.6		1,765.000	1,693.000	2.75	9.78	2.46	2.51
EHRE	1196	A	634.98	67	1	128	203		D	27.1		27.1		4,217.000	4,094.000	2.78	8.80	2.44	2.51
EHRE	1196	A	635.10	67	2	2	**204**	x	D	25.8		25.8		2,468.000	2,380.000	2.78	8.30	2.26	2.51
EHRE	1196	A	635.80	67	2	72	**205**	x	D	21.7		21.7		288.000	265.000	2.79	9.57	2.47	2.51
EHRE	1196	B	0.74	1	1	74	**206**	x	D	9.6		9.6		119.000	106.000	2.77	9.59	2.11	2.53
EHRE	1196	B	1.26	1	1	126	**207**	x	D	26.2		26.2		12,740.000	12,495.000	2.80	7.87	2.12	2.53
EHRE	1196	B	1.48	1	2	3	**208**	x	D	20.1		20.1		2,673.000	2,580.000	2.79	8.12		
EHRE	1196	B	2.12	1	2	67	**209**	x	D	23.6		23.6		7,762.000	7,582.000	2.79	8.26	2.15	2.53
EHRE	1196	B	28.87	4	1	7	**210**	x	M	46.2	43.0	**46.0**	X	3,581.000	3,470.000	2.77	6.16	2.28	2.53
EHRE	1196	B	38.61	5	1	41	**211**	x	L	41.3	38.1	**40.8**	X	1,985.000	1,908.000	2.73	6.49	2.20	2.53
EHRE	1196	B	48.23	6	1	103	**212**	x	D	32.8	31.3	32.8	X	2,330.000	2,244.000	2.82	7.03	2.08	2.53
EHRE	1196	B	110.28	13	1	28	213		D	49.8	39.7	**42.5**	X	50,000.000	50,000.000	2.80	6.85		
EHRE	1196	B	111.48	13	2	9	214		D	40.4		40.4		8,171.000	7,985.000	2.80	7.91		
EHRE	1196	B	115.01	14	1	31	215		D	49.7		49.7				2.81	7.26		
EHRE	1196	B	115.88	14	1	118	216		D	33.3		33.3		11,889.000	11,655.000	2.81	9.56		
EHRE	1196	B	116.22	14	2	7	217		D	40.3	34.3	**36.7**	X	40,517.000	40,019.000	2.81	7.57		
EHRE	1196	B	117.22	15	1	32	218		D	20.6		20.6		820.000	775.000	2.80	10.62	2.66	2.53
EHRE	1196	B	117.82	15	1	92	219		D	36.3		36.3		30,455.000	30,037.000	2.81	7.81	2.44	2.53
EHRE	1196	B	118.31	16	1	11	220		D	27.8		27.8		4,855.000	4,720.000	2.80	9.44	2.60	2.53
EHRE	1196	B	118.83	16	1	63	221		D	24.6		24.6		3,125.000	3,022.000	2.79	9.86	2.60	2.53
EHRE	1196	B	119.40	16	1	120	222		D	33.5		33.5		1,397.000	1,335.000	2.79	8.83	2.64	2.53
EHRE	1196	B	123.25	17	1	35	223		D	23.5		23.5		983.000	933.000	2.76	9.00	2.34	2.53
EHRE	1196	B	123.45	18	1	5	224		D	15.2		15.2		69.300	60.800	2.77	10.49	2.50	2.51
EHRE	1196	B	123.85	18	1	45	225		D	39.3		39.3		5,482.000	5,337.000	2.82	7.69	2.56	2.51
EHRE	1196	B	124.61	18	1	121	226		D	19.4		19.4		1,285.000	1,226.000	2.81	10.52	2.64	2.51
EHRE	1196	B	125.00	18	2	14	227		D	27.4		27.4		12,817.000	12,572.000	2.79	9.24	2.57	2.51
EHRE	1196	B	150.08	25	1	38	**228**	x	D	35.6	29.0	**31.0**	X	22,005.000	21,662.000	2.79	8.70	2.73	2.51
EHRE	1196	B	164.11	28	1	31	229		D	26.1		26.1		8,213.000	8,026.000	2.80	9.58	2.62	2.51
EHRE	1196	B	168.65	29	1	15	230		D	32.7		32.7		18,074.000	17,771.000	2.81	8.69	2.61	2.51
EHRE	1196	B	169.89	29	1	139	231		D	13.7		13.7		137.000	123.000	2.80	11.75	2.71	2.53
EHRE	1196	B	172.85	30	1	35	232		D	29.8	25.4	**27.2**	X	13,882.000	13,624.000	2.81	8.34	2.40	2.51
EHRE	1196	B	173.45	30	1	95	233		D	13.9		13.9		104.000	93.1	2.71	11.68	2.74	2.51
EHRE	1196	B	173.89	30	1	139	234		D	29.3		29.3		780.000	737.000	2.82	9.48	2.71	2.51
EHRE	1196	B	174.25	30	2	31	235		D	28.2		28.2		1,847.000	1,773.000	2.81	8.60	2.42	2.51
EHRE	1196	B	177.24	31	1	4	236		D	28.5		28.5		1,636.000	1,568.000	2.81	8.84	2.50	2.51
EHRE	1196	B	177.84	31	1	64	**237**	x	D	43.6		43.6		25,441.000	25,067.000	2.84	6.89	2.47	2.51
EHRE	1196	B	180.44	32	1	24	**238**	x	D	31.1		31.1		7,627.000	7,449.000	2.81	8.96	2.63	2.51
EHRE	1196	B	185.19	33	1	29	239		L							2.70	9.14		
EHRE	1196	B	185.55	33	1	65	240		L							2.72	0.00		

Table T1 (continued).

Code	Site	Hole	Depth (mbsf)	Core	Section	Top interval (cm)	Plug	TS	Mineralogy	Porosity (%)			XX	Gas permeability		Grain density (g/cm³)	Grain volume (cm³)	Length (cm)	Diameter (cm)
										PORC	PORM	PORX		(mD)	corrected* (mD)				
EHRE	1196	B	199.09	36	1	9	241		L							2.71	0.00		
EHRE	1196	B	213.51	39	1	41	**242**	x	L	24.9	21.5	**23.0**	X	1.970	1.400	2.71	9.63	2.59	2.51
EHRE	1196	B	232.98	44	1	8	**243**	x	L	21.3		21.3		0.393	0.253	2.71	8.74	2.19	2.54
EHRE	1196	B	234.45	45	1	15	**244**	x	L	41.6	47.0	**50.3**	X	10,946.000	10,724.000	2.74	4.39	2.12	2.41
EHRE	1199	A	0.15	1	1	15	**245**	x	D	31.6		31.6		18,883.000	18,571.000	2.80	8.97	2.63	2.52
EHRE	1199	A	0.26	1	1	26	**246**	x	D	22.0		22.0		11,052.000	10,828.000	2.80	9.25	2.36	2.53
EHRE	1199	A	0.96	1	1	96	**247**	x	D	14.4		14.4		1,112.000	1,058.000	2.76	9.13	2.12	2.53
EHRE	1199	A	1.84	1	2	38	**248**	x	D	13.8		13.8		618.000	581.000	2.71	9.58	2.21	2.53
EHRE	1199	A	2.14	1	2	68	**249**	x	D	20.0		20.0		1,650.000	1,581.000	2.75	8.75	2.21	2.51
EHRE	1199	A	2.85	1	2	139	**250**	x	D	19.4		19.4		6,577.000	6,414.000	2.73	8.96	2.23	2.52
EHRE	1199	A	3.18	1	3	30	251		D	16.9		16.9		2,640.000	2,548.000	2.76	9.12	2.22	2.51
EHRE	1199	A	3.50	1	3	62	252		D	22.4		22.4		9,772.000	9,564.000	2.77	8.88		
EHRE	1199	A	3.98	1	3	110	**253**	x	D	27.2	23.5	**25.1**	X	21,960.000	21,618.000	2.80	8.53	2.35	2.52
EHRE	1199	A	4.33	1	4	2	254		D	27.3		27.3		2,230.000	2,146.000	2.74	7.10	1.99	2.50
EHRE	1199	A	9.97	2	1	47	255		D	27.9		27.9		35,070.000	34,615.000	2.80	8.56	2.40	2.51
EHRE	1199	A	10.68	2	1	118	256		D	22.2		22.2		2,484.000	2,395.000	2.76	8.16	2.12	2.51
EHRE	1199	A	11.05	2	2	18	**257**	x	D	27.6		27.6		32,947.000	32,508.000	2.77	7.17	2.00	2.51
EHRE	1199	A	12.31	2	2	144	258		D	36.7		36.7		20,890.000	20,559.000	2.82	5.95	1.90	2.51
EHRE	1199	A	12.79	2	3	45	259		D	32.3		32.3		15,168.000	14,896.000	2.82	6.70	2.00	2.51
EHRE	1199	A	13.77	2	3	143	260		D	14.7		14.7		113.000	101.000	2.81	9.88	2.34	2.51
EHRE	1199	A	14.32	2	4	51	261		D	21.7		21.7		5,717.000	5,567.000	2.79	8.17	2.11	2.51
EHRE	1199	A	14.92	2	4	111	262		D	16.3		16.3		462.000	431.000	2.79	10.06	2.43	2.51
EHRE	1199	A	15.34	2	5	3	263		D	20.1		20.1		6,406.000	6,246.000	2.79	9.25	2.34	2.51
EHRE	1199	A	17.42	3	1	2	264		D	16.2		16.2		1,623.000	1,555.000	2.77	10.00	2.41	2.51
EHRE	1199	A	18.34	3	1	94	**265**	x	D	9.7		9.7		200.000	182.000	2.81	10.46	2.34	2.51
EHRE	1199	A	18.65	3	1	125	**266**	x	D	16.6		16.6		3,337.000	3,230.000	2.78	10.23	2.48	2.51
EHRE	1199	A	19.24	44	1	34	267		D	14.9		14.9		3,513.000	3,403.000	2.77	10.78	2.56	2.51
EHRE	1199	A	19.88	4	1	98	268		D	12.8		12.8		998.000	948.000	2.77	10.05		
EHRE	1199	A	20.31	4	1	141	269		D	19.1		19.1		197.000	179.000	2.77	7.85	1.96	2.51
EHRE	1199	A	20.86	4	2	52	270		D	10.6		10.6		485.000	453.000	2.76	10.09	2.28	2.51
EHRE	1199	A	22.14	4	3	45	271		D	20.5		20.5		25,988.000	25,609.000	2.78	9.44	2.40	2.51
EHRE	1199	A	23.04	4	3	135	272		D	9.1		9.1		26.000	21.900	2.77	10.57	2.35	2.51
EHRE	1199	A	23.18	4	4	5	273		D	8.4		8.4		4.300	3.470	2.77	10.75	2.37	2.51
EHRE	1199	A	24.53	4	4	140	274		D	15.3		15.3		611.000	574.000	2.75	9.68	2.31	2.51
EHRE	1199	A	25.35	4	5	79	275		D	16.5		16.5		4,362.000	4,236.000	2.76	9.50	2.30	2.51
EHRE	1199	A	25.95	4	5	139	276		D	12.1		12.1		374.000	347.000	2.77	9.57	2.20	2.51
EHRE	1199	A	26.53	4	6	55	277		D	12.5		12.5		9,101.000	8,902.000	2.77	10.11	2.30	2.53
EHRE	1199	A	27.21	4	6	123	278		D	10.9		10.9		3.460	2.740	2.74	10.58	2.40	2.51
EHRE	1199	A	27.00	5	1	20	279		D	12.7		12.7		39.400	33.800	2.77	10.58	2.41	2.53
EHRE	1199	A	28.11	5	1	131	280		D	23.2		23.2		32,577.000	32,142.000	2.81	9.23	2.41	2.52
EHRE	1199	A	28.87	5	2	59	281		D	15.0		15.0		112.000	99.800	2.80	9.88	2.33	2.52
EHRE	1199	A	29.60	5	2	132	282		D	17.0		17.0		2,483.000	2,394.000	2.81	9.80	2.35	2.53
EHRE	1199	A	30.29	5	3	55	**283**	x	D	22.5		22.5		16,602.000	16,314.000	2.80	8.80	2.26	2.53
EHRE	1199	A	31.02	5	3	128	284		D	10.7		10.7		157.000	142.000	2.77	10.20	2.29	2.52
EHRE	1199	A	31.46	5	4	23	285		D	15.1		15.1		232.000	212.000	2.78	9.47	2.22	2.53
EHRE	1199	A	31.58	5	4	35	286		D	19.2		19.2		4,112.000	3,990.000	2.80	7.66	1.90	2.52
EHRE	1199	A	32.05	5	4	82	287		D	21.0		21.0		2,115.000	2,035.000	2.79	7.81		
EHRE	1199	A	32.44	5	4	121	288		D	15.6		15.6		2,068.000	1,989.000	2.78	8.47	2.01	2.52

Table T1 (continued).

Code	Site	Hole	Depth (mbsf)	Core	Section	Top interval (cm)	Plug	TS	Mineralogy	Porosity (%)			XX	Gas permeability		Grain density (g/cm³)	Grain volume (cm³)	Length (cm)	Diameter (cm)
										PORC	PORM	PORX		(mD)	corrected* (mD)				
EHRE	1199	A	32.84	5	5	23	289		D	14.3		14.3		2,121.000	2,040.000	2.77	9.73	2.26	2.53
EHRE	1199	A	33.25	5	5	64	290		D	13.8		13.8		913.000	866.000	2.77	9.32	2.15	2.53
EHRE	1199	A	33.97	5	5	136	**291**	x	D	14.9		14.9		3,635.000	3,522.000	2.76	8.38	1.96	2.53
EHRE	1199	A	34.05	5	5	144	**292**	x	D	3.4		3.4		0.167	0.102	2.78	10.68	2.20	2.53
EHRE	1199	A	34.18	5	6	8	293		D	6.9		6.9		271.000	250.000	2.80	10.16	2.17	2.53
EHRE	1199	A	35.87	6	1	17	294		D	11.9		11.9		187.000	170.000	2.80	8.96	2.04	2.52
EHRE	1199	A	37.45	6	2	25	295		D	10.1		10.1		0.947	0.642	2.81	10.45	2.33	2.52
EHRE	1199	A	37.93	6	2	73	296		D	15.3		15.3		24,888.000	24,519.000	2.80	10.05	2.38	2.52
EHRE	1199	A	38.54	6	2	134	297		D	18.2		18.2		8,957.000	8,760.000	2.80	9.42	2.29	2.53
EHRE	1199	A	38.82	6	3	12	298		D	6.5		6.5		0.465	0.302	2.75	9.92	2.11	2.53
EHRE	1199	A	39.43	6	3	73	299		D	7.0		7.0		67.300	59.100	2.74	10.03	2.18	2.51
EHRE	1199	A	40.04	6	3	134	300		D	15.3		15.3		27,329.000	26,938.000	2.79	10.48	2.50	2.51
EHRE	1199	A	40.44	6	4	26	301		D	13.2		13.2		50,000.000	50,000.000	2.79	7.99		
EHRE	1199	A	40.62	6	4	44	302		D	12.3		12.3		16.9	14.2	2.81	10.29	2.37	2.51
EHRE	1199	A	45.49	7	1	39	303		D	16.1		16.1		4,416.000	4,289.000	2.79	8.84	2.13	2.51
EHRE	1199	A	46.13	7	1	103	304		D	16.0		16.0		10,726.000	10,507.000	2.80	8.85	2.13	2.51
EHRE	1199	A	46.28	7	1	118	305		D	9.6		9.6		191.000	174.000	2.79	11.59	2.55	2.53
EHRE	1199	A	46.70	7	2	19	306		D	12.7		12.7		2.54	1.95	2.78	9.85	2.28	2.51
EHRE	1199	A	47.09	7	2	58	**307**	x	D	15.4		15.4		346.000	321.000	2.79	10.38		
EHRE	1199	A	47.62	7	2	111	308		D	10.0		10.0		27.0	22.9	2.78	10.46	2.33	2.52
EHRE	1199	A	48.28	7	3	30	309		D	11.3		11.3		3.70	2.95	2.75	10.49	2.37	2.52
EHRE	1199	A	48.68	7	3	70	310		D	11.1		11.1		529.000	496.000	2.77	8.98	2.01	2.53
EHRE	1199	A	54.17	8	1	17	311		D	10.3		10.3		471.000	439.000	2.73	9.71	2.17	2.52
EHRE	1199	A	55.14	8	1	114	312		D	19.7		19.7		7,844.000	7,663.000	2.80	8.89	2.22	2.52
EHRE	1199	A	55.29	8	1	129	313		D	20.2		20.2		3,116.000	3,014.000	2.77	8.45	2.14	2.51
EHRE	1199	A	55.55	8	2	15	314		D	16.6		16.6		1,949.000	1,873.000	2.75	7.76	1.88	2.51
EHRE	1199	A	56.71	8	2	131	315		D	14.7		14.7		1,391.000	1,329.000	2.75	9.87	2.32	2.52
EHRE	1199	A	57.06	8	3	21	316		D	19.7		19.7		14,961.000	14,691.000	2.80	9.60		
EHRE	1199	A	57.50	8	3	65	317		D	16.2		16.2		3,609.000	3,497.000	2.79	9.49	2.29	2.51
EHRE	1199	A	64.27	9	1	67	318		D	8.4		8.4		235.000	215.000	2.76	9.31	2.02	2.53
EHRE	1199	A	64.76	9	1	116	319		D	10.4		10.4		189.000	172.000	2.77	10.54	2.34	2.53
EHRE	1199	A	65.36	9	2	31	320		D	6.5		6.5		0.437	0.283	2.75	11.15	2.39	2.52
EHRE	1199	A	66.37	9	2	132	321		D	8.4		8.4		3.280	2.590	2.78	11.19	2.43	2.53
EHRE	1199	A	66.83	9	3	33	**322**	x	D	4.8		4.8		1.710	1.200	2.76	10.66	2.24	2.53
EHRE	1199	A	67.72	9	3	122	323		D	15.4		15.4		3,806.000	3,690.000	2.79	9.96	2.36	2.52
EHRE	1199	A	67.94	9	4	2	**324**	x	D	17.6		17.6		8,788.000	8,594.000	2.79	9.95	2.42	2.52
EHRE	1199	A	68.85	9	4	93	325		D	8.7		8.7		1.99	1.41	2.75	11.29	2.46	2.53
EHRE	1199	A	69.43	9	5	11	326		D	9.1		9.1		2.56	1.97	2.76	11.43	2.50	2.53
EHRE	1199	A	70.57	9	5	125	327		D	7.0		7.0		0.190	0.117	2.75	11.04	2.38	2.52
EHRE	1199	A	70.94	9	6	20	328		D	10.0		10.0		119.000	106.000	2.78	10.69	2.40	2.51
EHRE	1199	A	71.33	9	6	59	329		D	13.0		13.0		0.128	0.077	2.76	10.35	2.20	2.51
EHRE	1199	A	71.84	9	6	110	330		D	4.7		4.7		3.820	3.050	2.78	10.84	2.30	2.51
EHRE	1199	A	72.61	9	7	39	331		D	14.4		14.4		2,234.000	2,151.000	2.79	10.08	2.38	2.51
EHRE	1199	A	73.50	10	1	30	332		D	17.0		17.0		3,615.000	3,503.000	2.79	10.13	2.47	2.51
EHRE	1199	A	74.02	10	1	82	333		D	17.5		17.5		5,051.000	4,913.000	2.79	9.88	2.42	2.51
EHRE	1199	A	75.10	10	2	40	334		D	37.1	31.1	**33.3**	X	50,000.000	50,000.000	2.85	8.00	2.57	2.51
EHRE	1199	A	75.41	10	2	71	335		D	11.8		11.8		107.000	95.200	2.80	11.12	2.51	2.53
EHRE	1199	A	76.12	10	2	142	336		D	14.5		14.5		4,700.000	4,567.000	2.78	10.31	2.44	2.51

Table T1 (continued).

Code	Site	Hole	Depth (mbsf)	Core	Section	Top interval (cm)	Plug	TS	Mineralogy	Porosity (%)			XX	Gas permeability		Grain density (g/cm³)	Grain volume (cm³)	Length (cm)	Diameter (cm)
										PORC	PORM	PORX		(mD)	corrected* (mD)				
EHRE	1199	A	76.33	10	3	16	337		D	9.9		9.9		0.828	0.557	2.76	10.96	2.44	2.52
EHRE	1199	A	76.80	10	3	63	338		D	4.1		4.1		0.711	0.474	2.75	9.88	2.10	2.50
EHRE	1199	A	77.40	10	3	123	**339**	x	D	5.0		5.0		0.450	0.292	2.78	9.47	2.00	2.52
EHRE	1199	A	78.21	10	4	60	**340**	x	D	18.2		18.2		1,640.000	1,572.000	2.79	8.23	2.02	2.52
EHRE	1199	A	78.85	10	4	124	341		D	7.1		7.1		40.000	34.500	2.80	11.90	2.57	2.52
EHRE	1199	A	79.19	10	5	13	342		D	12.4		12.4		285.000	263.000	2.79	10.87	2.49	2.52
EHRE	1199	A	80.06	10	5	100	343		D	11.6		11.6		598.000	562.000	2.79	10.84	2.44	2.53
EHRE	1199	A	82.93	11	1	13	344		D	5.9		5.9		0.886	0.598	2.74	12.68	2.68	2.53
EHRE	1199	A	83.91	11	1	111	345		D	5.0		5.0		0.220	0.137	2.76	11.98	2.51	2.53
EHRE	1199	A	84.26	11	1	146	346		D	8.1		8.1		0.547	0.359	2.76	10.52	2.28	2.53
EHRE	1199	A	85.14	11	2	84	347		D	16.5		16.5		1,793.000	1,721.000	2.79	10.41	2.52	2.51
EHRE	1199	A	85.62	11	2	132	348		D	10.1		10.1		3.470	2.750	2.75	11.38	2.52	2.53
EHRE	1199	A	86.17	11	3	38	349		D	8.3		8.3		301.000	277.000	2.77	9.38	2.07	2.51
EHRE	1199	A	86.69	11	3	90	350		D	3.3		3.3		0.328	0.208	2.78	12.19	2.53	2.52
EHRE	1199	A	92.55	12	1	5	351		D	6.4		6.4		0.157	0.095	2.75	10.55	2.28	2.51
EHRE	1199	A	93.56	12	1	106	**352**	x	D	13.5		13.5		3,579.000	3,468.000	2.78	8.13	1.98	2.46
EHRE	1199	A	94.17	12	2	19	**353**	x	D	5.2		5.2		0.135	0.081	2.77	12.48	2.62	2.53
EHRE	1199	A	95.31	12	2	133	354		D	4.6		4.6		0.672	0.446	2.76	12.21	2.59	2.51
EHRE	1199	A	95.59	12	3	21	355		D	9.3		9.3		101.000	89.700	2.77	11.57	2.58	2.51
EHRE	1199	A	96.31	12	3	93	356		D	6.6		6.6		1.060	0.726	2.76	11.54	2.50	2.51
EHRE	1199	A	96.81	12	4	1	357		D	7.0		7.0		0.175	0.107	2.77	12.69	2.76	2.51
EHRE	1199	A	97.87	12	4	107	358		D	1.9		1.9		0.472	0.307	2.77	12.18	2.49	2.52
EHRE	1199	A	98.51	12	5	28	359		D	12.5		12.5		2,689.000	2,596.000	2.77	10.64	2.42	2.53
EHRE	1199	A	99.05	12	5	82	360		D	9.0		9.0		2,701.000	2,608.000	2.77	10.92	2.39	2.53
EHRE	1199	A	99.60	12	5	137	361		D	2.6		2.6		0.264	0.166	2.75	11.65	2.38	2.53
EHRE	1199	A	99.92	12	6	26	362		D	6.4		6.4		0.212	0.131	2.74	10.95	2.33	2.53
EHRE	1199	A	100.58	12	6	92	363		D	6.0		6.0		0.293	0.185	2.79	11.01	2.35	2.52
EHRE	1199	A	101.34	12	7	18	364		D	2.8	3.0	2.8	X	6.030	5.000	2.77	12.31	2.54	2.52
EHRE	1199	A	102.00	12	7	84	365		D	7.4		7.4		101.000	90.500	2.78	11.90	2.60	2.51
EHRE	1199	A	102.34	13	1	24	366		D	4.4		4.4		0.125	0.075	2.75	11.53	2.44	2.51
EHRE	1199	A	103.50	13	1	140	367		D	11.4		11.4		2,108.000	2,028.000	2.76	9.68	2.21	2.51
EHRE	1199	A	103.98	13	2	44	368		D	3.2		3.2		0.071	0.041	2.70	11.38	2.36	2.52
EHRE	1199	A	104.31	13	2	77	369		D	4.5		4.5		0.142	0.086	2.70	12.76	2.68	2.52
EHRE	1199	A	104.73	13	2	119	370		D	10.7		10.7		0.297	0.188	2.75	12.07	2.71	2.52
EHRE	1199	A	105.24	13	3	47	371		D	6.8		6.8		0.221	0.137	2.69	9.95	2.16	2.51
EHRE	1199	A	105.83	13	3	106	372		D	10.0		10.0		5,673.000	5,525.000	2.76	10.59	2.38	2.51
EHRE	1199	A	106.14	13	3	137	373		D	13.0		13.0		7,234.000	7,062.000	2.75	11.19	2.58	2.52
EHRE	1199	A	106.24	13	4	3	374		D	4.5	3.2	**3.4**	X	0.193	0.119	2.74	8.36	1.77	2.51
EHRE	1199	A	107.12	13	4	91	**375**	x	D	9.7		9.7		372.000	345.000	2.78	10.84	2.43	2.51
EHRE	1199	A	107.86	13	5	19	376		D	8.0		8.0		180.000	164.000	2.77	12.33	2.71	2.51
EHRE	1199	A	108.55	13	5	88	377		D	18.3		18.3		582.000	547.000	2.80	10.79	2.67	2.51
EHRE	1199	A	111.85	14	1	5	378		D	6.6		6.6		1.140	0.779	2.76	11.54	2.50	2.51
EHRE	1199	A	112.25	14	1	45	379		D	7.2		7.2		37.7	32.5	2.77	11.15	2.41	2.52
EHRE	1199	A	112.88	14	1	108	380		D	14.2	9.5	**10.2**	X	76.600	67.600	2.80	10.27	2.42	2.51
EHRE	1199	A	113.72	14	2	46	381		D	3.2		3.2		0.281	0.177	2.76	11.67	2.44	2.51
EHRE	1199	A	114.40	14	2	114	382		D	5.2		5.2		3.370	2.670	2.79	11.02	2.14	2.52
EHRE	1199	A	122.02	15	1	62	**383**	x	D	21.7		21.7		22,866.000	22,387.000	2.78	9.30	2.38	2.52
EHRE	1199	A	131.42	16	1	42	**384**	x	D	15.0		15.0		6,584.000	6,421.000	2.79	11.07	2.61	2.52

Table T1 (continued).

Code	Site	Hole	Depth (mbsf)	Core	Section	Top interval (cm)	Plug	TS	Mineralogy	Porosity (%)			XX	Gas permeability		Grain density (g/cm³)	Grain volume (cm³)	Length (cm)	Diameter (cm)
										PORC	PORM	PORX		(mD)	corrected* (mD)				
EHRE	1199	A	131.95	16	1	95	385		D	12.3		12.3		342.000	317.000	2.79	10.41	2.38	2.52
EHRE	1199	A	132.41	16	1	141	386		D	6.0		6.0		0.628	0.415	2.77	11.53	2.46	2.52
EHRE	1199	A	132.88	16	2	42	387		D	9.8		9.8		514.000	481.000	2.79	11.43	2.54	2.52
EHRE	1199	A	133.75	16	2	129	388		D	17.1		17.1		6,966.000	6,798.000	2.81	8.31	2.01	2.52
EHRE	1199	A	134.40	16	3	47	389		D	13.7		13.7		5,407.000	5,263.000	2.75	10.24	2.38	2.52
EHRE	1199	A	134.86	16	3	93	390		D	6.6		6.6		0.345	0.220	2.79	11.84	2.54	2.52
EHRE	1199	A	135.20	16	3	127	391		D	8.4		8.4		0.810	0.544	2.75	10.51	2.30	2.52
EHRE	1199	A	135.49	16	4	10	392		D	18.3		18.3		23,430.000	23,074.000	2.76	10.76	2.64	2.52
EHRE	1199	A	135.86	16	4	47	**393**	x	D	14.9		14.9		294.000	271.000	2.81	9.46	2.23	2.52
EHRE	1199	A	137.11	16	5	27	**394**	x	D	8.1		8.1		1.60	1.12	2.76	11.88	2.59	2.52
EHRE	1199	A	137.82	16	5	98	395		D	22.7		22.7		6,489.000	6,328.000	2.79	8.75	2.27	2.52
EHRE	1199	A	140.63	17	1	3	396		D	18.5		18.5		76.6	67.7	2.76	10.53	2.57	2.53
EHRE	1199	A	141.00	17	1	40	397		D	22.7		22.7		9,326.000	9,124.000	2.79	8.94	2.30	2.53
EHRE	1199	A	150.34	18	1	14	398		D	18.6		18.6		143.000	129.000	2.77	11.21	2.76	2.52
EHRE	1199	A	151.62	18	1	142	399		D	13.0		13.0		43.3	37.6	2.80	11.07	2.55	2.52
EHRE	1199	A	151.97	18	2	29	400		D	14.1		14.1		191.000	174.000	2.79	10.50	2.45	2.52
EHRE	1199	A	152.35	18	2	67	401		D	16.1		16.1		759.000	717.000	2.81	10.29	2.46	2.52
EHRE	1199	A	153.02	18	2	134	402		D	4.9		4.9		0.623	0.412	2.79	11.67	2.46	2.52
EHRE	1199	A	153.46	18	3	29	**403**	x	D	6.4		6.4		8.34	6.91	2.78	11.49	2.46	2.52
EHRE	1199	A	314.09	35	1	39	**404**	x	D	22.5		22.5		1,547.000	1,480.000	2.81	6.47	1.66	2.53
EHRE	1199	A	314.23	35	1	53	**405**	x	M	48.9	39.7	**42.5**	X	153.000	139.000	2.71	5.13	2.18	2.42
EHRE	1199	A	352.73	39	1	53	**406**	x	D	3.3		3.3		0.128	0.077	2.77	12.49	2.57	2.53
EHRE	1199	A	353.16	39	1	96	**407**	x	L	27.7	26.5	27.7	X	39,329.000	38,840.000	2.71	6.44	1.80	2.51
EHRE	1199	A	361.83	40	1	3	**408**	x	L	37.5	32.3	**34.6**	X	50,000.000	50,000.000	2.71	5.63	1.82	2.51
EHRE	1199	A	362.64	40	1	84	**409**	x	M	30.4	28.6	30.4	X	365.000	338.000	2.72	7.53	2.24	2.48
EHRE	1199	A	371.53	41	1	13	**410**	x	L	49.5	43.6	**46.7**	X	1,239.000	1,182.000	2.72	4.73	2.07	2.40
EHRE	1199	A	371.63	41	1	23	411		L	47.9	41.9	**44.8**	X	1,374.000	1,313.000	2.72	4.80	2.22	2.30
EHRE	1199	A	372.01	41	1	61	**412**	x	M	46.1	40.8	**43.7**	X	560.000	526.000	2.71	6.30	2.38	2.50
EHRE	1199	A	372.64	41	1	124	413		L	45.8	41.2	**44.1**	X	1,973.000	1,896.000	2.70	4.56	2.10	2.26
EHRE	1199	A	373.11	41	2	25	414		L	49.4	39.3	**42.1**	X	1,730.000	1,659.000	2.67	5.70	2.76	2.28
EHRE	1199	A	381.60	42	1	50	**415**	x	L	46.4	42.3	**45.3**	X	4,709.000	4,577.000	2.69	4.63	2.38	2.15

Notes: EHRE = horizontal plug. The plug number indicates the photomicrograph number in Pl. **AP1,** p. 30. TS: x = thin section made. Mineralogy: C = calcite; D = dolomite; M = mixed calcite + dolomite. PORC = porosity calculated using plug volume measured by caliper, PORM = porosity calculated using plug volume measured by mercury displacement, PORX = recommended porosity values (corrected values in bold). XX = reason selected for mercury-displacement porosity analysis: O = plug with good cylindrical shape selected as control, X = plug shape irregular in some respect, + = missing PORC value. * = Klinkenberg-corrected gas permeability. This table is also available in **ASCII.**

Table T2. Vertical plug sample data. (**See table notes.** Continued on next five pages.)

Code	Site	Hole	Depth (mbsf)	Core	Section	Top interval (cm)	Plug	Miami	TS	Mineralogy	Porosity (%)		Gas permeability		Grain density (g/cm^3)	Grain volume (cm^3)	Length (cm)	Diameter (cm)
											PORC	PORX	(mD)	corrected* (mD)				
BRAG	1193	A	42.53	7	1	63	416	1		L	18.2	18.2	2.030	1.530		12.62	3.07	2.53
BRAG	1193	A	43.15	7	1	125	417	2	x	L	16.8	16.8	1,644.000	1,575.000		11.45	2.74	2.53
BRAG	1193	A	123.78	22		8	418	3		M	21.2	21.2	263.000	242.000		7.29	1.84	2.53
BRAG	1193	A	157.44	29	1	44	419	4		D	22.9	22.9	71.400	62.600		7.67	1.98	2.53
BRAG	1193	A	157.58	29	1	58	420	5	x	D	32.9	32.9	2,203.000	2,121.000		8.91	2.64	2.53
BRAG	1193	A	157.68	29	1	68	421	6		D	28.9	28.9	2,185.000	2,103.000		8.43	2.36	2.53
BRAG	1193	B	35.30	1	1	30	463	48	x	L	3.5	3.5	0.057	0.032		14.69	3.03	2.53
BRAG	1193	B	35.78	1	1	78	464	49	x	L	10.9	10.9	0.200	0.124		13.80	3.08	2.53
BRAG	1193	B	36.13	1	1	113	465	50	x	L	23.5	23.5	3,196.000	3,092.000		10.30	2.68	2.53
BRAG	1193	B	36.26	1	1	126	466	51		L						8.65		
BRAG	1193	B	37.01	1	2	51	467	52		L	19.2	19.2	0.183	0.112		11.66	2.87	2.53
BRAG	1193	B	37.34	1	2	84	468	53	x	L	22.0	22.0	5.210	4.270		13.57	3.46	2.53
BRAG	1193	B	44.57	2	1	17	469	54	x	L	19.3	19.3	2.050	1.540		14.85	3.66	2.53
BRAG	1193	B	44.86	2	1	46	470	55		L	22.6	22.6	0.664	0.441		12.30	3.16	2.53
BRAG	1193	B	45.28	2	1	88	471	56	x	L	26.4	26.4	5,195.000	5,054.000		11.70	3.15	2.53
BRAG	1193	B	45.84	2	2	2	472	57		L	23.5	23.5	18.800	15.900		9.61	2.50	2.53
BRAG	1193	B	63.66	5	1	46	473	58		L	14.3	14.3	2.070	1.560		10.03	3.33	2.53
BRAG	1193	B	67.96	6	1	6	474	59		L	31.7	31.7	13,752.000	13,496.000		14.34	4.18	2.53
BRAG	1193	B	68.04	6	1	14	475	60	x	L	29.6	29.6	10,560.000	10,343.000		12.89	3.64	2.53
BRAG	1193	B	68.54	6	1	64	476	61		L	21.5	21.5	1.210	0.832		11.99	3.04	2.53
BRAG	1193	B	68.81	6	1	91	477	62		L	22.8	22.8	3.340	2.640		11.06	2.85	2.53
BRAG	1193	B	69.16	6	1	126	478	63		L	21.2	21.2	1,491.000	1,427.000		12.68	3.20	2.53
BRAG	1193	B	73.46	8	1	26	479	64	x	L	24.9	24.9	943.000	895.000		13.52	3.58	2.53
BRAG	1193	B	73.84	8	1	64	480	65		L	29.6	29.6	14,503.000	14,239.000		11.54	3.26	2.53
BRAG	1193	B	73.99	8	1	79	481	66		L	37.7	37.7	18,671.000	18,362.000		10.86	3.47	2.53
BRAG	1193	B	74.21	8	1	101	482	67		L	50.7	50.7	50,000.000	50,000.000		6.44	2.60	2.53
BRAG	1193	B	77.60	9	1	70	483	68		L	25.5	25.5	11.200	9.250		8.24	2.20	2.53
BRAG	1193	B	86.52	11	1	22	484	69		L	25.2	25.2	1,705.000	1,635.000		9.18	2.44	2.53
BRAG	1193	B	87.41	11	1	111	485	70		L	26.9	26.9	0.650	0.430		10.07	2.74	2.53
BRAG	1193	B	87.58	12	1	128	486	71	x	L	16.4	16.4	0.212	0.131		13.06	3.11	2.53
BRAG	1193	B	91.07	12	1	7	487	72	x	L	22.1	22.1	1.480	1.030		11.82	3.02	2.53
BRAG	1193	B	91.54	12	1	54	488	73		L	28.1	28.1	26,046.000	25,667.000		9.83	2.72	2.53
BRAG	1193	B	91.71	14	1	71	489	74	x	L	39.5	39.5	6,356.000	6,197.000		10.15	3.34	2.53
BRAG	1193	B	100.41	17	1	1	490	75		M	31.5	31.5	9,521.000	9,317.000		10.50	3.05	2.53
BRAG	1193	B	114.77	20	1	27	491	76	x	M	40.3	40.3	559.000	525.000		9.90	3.30	2.53
BRAG	1193	B	128.96	20	1	36	492	77	x	D	33.9	33.9	4,466.000	4,338.000		13.73	4.13	2.53
BRAG	1193	B	129.15	20	1	55	493	78		D	39.6	39.6	6,715.000	6,550.000		7.89	2.60	2.53
BRAG	1193	C	35.00	1	1	0	494	79		L	9.6	9.6	0.439	0.284		13.22	2.98	2.50
BRAG	1193	C	35.32	1	1	32	495	80		L	7.4	7.4	0.076	0.044		13.28	2.90	2.51
BRAG	1193	C	35.87	1	1	87	496	81		L	6.4	6.4	0.060	0.034		14.29	3.04	2.53
BRAG	1193	C	36.18	1	1	118	497	82		L	12.5	12.5	0.277	0.175		12.22	2.78	2.53
BRAG	1193	C	36.47	1	2	12	498	83	x	L	27.1	27.1	1,474.000	1,410.000		12.77	3.57	2.50
BRAG	1193	C	36.69	1	2	34	499	84		L	13.4	13.4	0.271	0.170		9.70	2.23	2.53
BRAG	1193	C	37.55	1	2	120	500	85		L	13.0	13.0	7.240	5.820		8.39	1.92	2.53
BRAG	1193	C	44.56	2	1	16	501	86		L	18.8	18.8	25.000	21.300		10.36	2.56	2.52
BRAG	1193	C	51.51	3	1	11	502	87		L	25.0	25.0	6.360	5.200		8.66	2.30	2.53
BRAG	1193	C	51.58	3	1	18	503	88		L	20.2	20.2	1.960	1.390		5.92	1.49	2.52
BRAG	1193	C	60.92	4	1	32	504	89		L	15.1	15.1	2.560	1.970		9.56	2.26	2.52
BRAG	1193	C	61.49	4	1	89	505	90		L	34.1	34.1	2,491.000	2,402.000		8.61	2.62	2.52

Table T2 (continued).

Code	Site	Hole	Depth (mbsf)	Core	Section	Top interval (cm)	Plug	Miami	TS	Mineralogy	Porosity (%)		Gas permeability		Grain density (g/cm³)	Grain volume (cm³)	Length (cm)	Diameter (cm)
											PORC	PORX	(mD)	corrected* (mD)				
BRAG	1193	C	62.15	4	2	8	506	91		L	20.0	20.0	6.700	5.500		8.63	2.29	2.45
BRAG	1196	A	0.66	1	1	66	510	147	x	D	23.9	23.9	2,112.000	2,032.000		12.30	3.22	2.53
BRAG	1196	A	9.60	2	1	0	511	148		D	11.5	11.5	1.070	0.730		13.43	3.02	2.53
BRAG	1196	A	9.82	2	1	22	512	149		D	27.4	27.4	26,244.000	25,863.000		11.19	3.07	2.53
BRAG	1196	A	19.16	3	1	26	513	150		D	19.9	19.9	3,372.000	3,265.000		8.42	3.35	2.49
BRAG	1196	A	28.66	4	1	16	514	151		L	47.1	47.1	1,656.000	1,587.000		8.56	3.22	2.53
BRAG	1196	A	29.45	4	1	95	515	152	x	L	27.0	27.0	29.400	25.200		10.42	2.84	2.53
BRAG	1196	A	38.28	5	1	8	516	153		L	35.9	35.9	5,020.000	4,883.000		7.83	2.47	2.51
BRAG	1196	A	39.52	5	1	132	517	154	x	L	32.9	32.9	655.000	617.000		10.38	3.08	2.53
BRAG	1196	A	48.36	6	1	86	519	156	x	D	38.2	38.2	16,250.000	15,966.000		8.60	2.77	2.53
BRAG	1196	A	48.95	6	1	145	520	157	x	D	30.1	30.1	1,740.000	1,669.000		10.46	2.98	2.53
BRAG	1196	A	57.28	7	1	38	521	158		D	33.8	33.8	605.000	569.000		11.50	3.46	2.53
BRAG	1196	A	58.23	7	1	133	522	159	x	D	29.4	29.4	357.000	331.000		11.50	3.24	2.53
BRAG	1196	A	58.32	7	2	1	523	160		D	41.7	41.7	6,076.000	5,922.000		10.78	3.71	2.52
BRAG	1196	A	58.81	7	2	50	524	161		D	32.4	32.4	16.900	14.500		9.65	3.82	2.52
BRAG	1196	A	76.40	9	1	30	525	162		D	31.1	31.1	176.000	160.000		9.45	2.73	2.53
BRAG	1196	A	77.40	9	1	130	526	163		D	37.8	37.8	6,535.000	6,373.000		10.05	3.22	2.53
BRAG	1196	A	77.78	9	2	26	527	164		D	40.8	40.8	7,066.000	6,896.000		10.06	3.38	2.53
BRAG	1196	A	105.49	12	1	49	528	165	x	D	27.7	27.7	781.000	738.000		10.55	2.93	2.52
BRAG	1196	A	106.10	12	1	110	529	166	x	D	32.4	32.4	1,160.000	1,105.000		11.02	3.27	2.52
BRAG	1196	A	115.18	13	1	48	530	167		D	33.8	33.8	4,989.000	4,852.000		7.92	2.40	2.52
BRAG	1196	A	116.11	13	1	141	531	168		D	32.9	32.9	19,844.000	19,523.000		7.46	2.23	2.52
BRAG	1196	A	116.36	13	2	16	532	169	x	D	33.4	33.4	12,178.000	11,940.000		9.99	3.01	2.52
BRAG	1196	A	117.10	13	2	90	533	170		D	21.4	21.4	1,500.000	1,435.000		13.19	3.37	2.52
BRAG	1196	A	124.56	14	1	26	534	171		D	20.3	20.3	915.000	868.000		12.39	3.12	2.52
BRAG	1196	A	125.40	14	1	110	535	172		D	27.9	27.9	1,338.000	1,278.000		12.00	3.34	2.52
BRAG	1196	A	125.74	14	2	4	536	173		D	13.8	13.8	2.130	1.610		11.77	2.74	2.52
BRAG	1196	A	144.13	16	1	63	537	174	x	D	18.6	18.6	1.050	0.717		13.14	3.24	2.52
BRAG	1196	A	163.33	18	1	63	538	175		D	29.9	29.9	7,782.000	7,602.000		9.89	2.83	2.52
BRAG	1196	A	163.61	18	1	91	539	176	x	D	49.3	49.3	63,582.000	62,926.000		4.75	1.88	2.52
BRAG	1196	A	164.57	18	2	41	540	177	x	D	11.8	11.8	0.547	0.359		15.55	3.54	2.52
BRAG	1196	A	164.76	18	2	60	541	178	x	D	22.2	22.2	228.000	209.000		11.32	2.92	2.52
BRAG	1196	A	166.15	18	3	49	542	179	x	D	31.3	31.3	15,323.000	15,049.000		9.24	2.70	2.52
BRAG	1196	A	166.22	18	3	56	5,420			D	33.7	33.7	44,735.000	44,206.000		8.13	2.46	2.52
BRAG	1196	A	166.67	18	3	101	543	180	x	D	19.0	19.0	33.600	29.100		14.70	3.67	2.51
BRAG	1196	A	172.57	19	1	27	544	181		D	20.0	20.0	570.000	536.000		13.98	3.48	2.53
BRAG	1196	A	173.29	19	1	99	545	182		D	17.7	17.7	131.000	118.000		15.21	3.71	2.52
BRAG	1196	A	174.00	19	2	27	546	183	x	D	29.3	29.3	2,512.000	2,423.000		12.33	3.50	2.52
BRAG	1196	A	174.82	19	2	109	547	184	x	D	20.6	20.6	2,722.000	2,628.000		13.77	3.48	2.52
BRAG	1196	A	191.58	21	1	8	548	185		L	18.3	18.3	0.203	0.125		11.56	2.84	2.52
BRAG	1196	A	191.74	21	1	24	549	186		L	15.9	15.9	0.135	0.081		16.26	3.88	2.52
BRAG	1196	A	230.23	25	1	33	550	187	x	L	18.1	18.1	0.223	0.138		14.41	3.53	2.52
BRAG	1196	A	287.63	31	1	3	551	188	x	L	16.9	16.9	0.158	0.096		15.03	3.63	2.52
BRAG	1196	A	307.18	33	1	28	552	189		L	16.4	16.4	1.130	0.771		10.17	2.42	2.53
BRAG	1196	A	308.25	33	1	135	553	190	x	L	6.8	6.8	0.042	0.023		16.57	2.54	2.53
BRAG	1196	A	308.38	33	2	2	554	191		L	5.9	5.9	0.058	0.033		14.84	3.14	2.53
BRAG	1196	A	308.61	33	2	25	555	192		L	24.8	24.8				11.74		
BRAG	1196	A	413.20	44	1	50	556	193		D	33.0	33.0	13,188.000	12,938.000		10.77	3.20	2.53
BRAG	1196	A	413.59	44	1	89	557	194	x	D	15.2	15.2	2,427.000	2,340.000		13.59	3.19	2.53

Table T2 (continued).

Code	Site	Hole	Depth (mbsf)	Core	Section	Top interval (cm)	Plug	Miami	TS	Mineralogy	Porosity (%)		Gas permeability		Grain density (g/cm³)	Grain volume (cm³)	Length (cm)	Diameter (cm)
											PORC	PORX	(mD)	corrected* (mD)				
BRAG	1196	A	451.55	48	1	45	558	195	x	D	11.8	11.8	103.000	92.200		14.53	3.28	2.53
BRAG	1196	A	452.23	48	1	113	559	196		D	18.5	18.5	1,238.000	1,181.000		13.80	3.37	2.53
BRAG	1196	A	470.94	50	1	54	560	197	x	D	21.0	21.0	11,778.000	11,545.000		14.28	3.60	2.53
BRAG	1196	A	480.14	51	1	14	561	198	x	D	11.2	11.2	360.000	334.000		11.38	2.55	2.53
BRAG	1196	A	481.02	51	1	102	562	199		D	3.1	3.1	0.022	0.012		16.11	3.31	2.53
BRAG	1196	A	482.29	51	2	81	563	200		D	1.2	1.2	0.228	0.142		14.35	2.89	2.53
BRAG	1196	A	483.78	51	3	82	564	201	x	D	11.6	11.6	137.000	123.000		16.11	3.63	2.53
BRAG	1196	A	484.87	51	4	50	565	202		D	11.8	11.8	61.400	53.600		12.89	2.91	2.53
BRAG	1196	A	490.55	52	1	85	566	203	x	D	9.3	9.3	14.600	12.200		11.75	2.52	2.53
BRAG	1196	A	491.19	52	2	2	567	204	x	D	14.6	14.6	136.000	122.000		10.47	2.44	2.53
BRAG	1196	A	491.87	52	2	70	568	205	x	D	14.7	14.7	62.200	54.300		10.67	2.49	2.53
BRAG	1196	A	493.15	52	3	48	569	206		D	9.7	9.7	1.350	0.936		13.52	2.98	2.53
BRAG	1196	A	494.69	52	4	55	570	207	x	D	7.3	7.3	0.061	0.035		13.51	2.90	2.53
BRAG	1196	A	496.03	52	5	39	571	208		D	7.6	7.6	0.016	0.008		12.95	2.79	2.53
BRAG	1196	A	497.35	52	6	21	572	209	x	D	11.6	11.6	599.000	563.000		12.35	2.78	2.53
BRAG	1196	A	499.36	53	1	6	573	210	x	D	10.2	10.2	106.000	94.200		12.36	2.74	2.53
BRAG	1196	A	500.65	53	1	135	574	211	x	D	5.1	5.1	3.100	2.430		12.30	2.68	2.53
BRAG	1196	A	501.02	53	2	22	575	212		D	14.5	14.5	0.641	0.424		12.13	2.89	2.50
BRAG	1196	A	501.49	53	2	69	576	213		D	7.8	7.8	0.016	0.008		15.51	3.35	2.53
BRAG	1196	A	502.01	53	2	121	577	214		D	7.9	7.9	0.014	0.007		11.05	2.39	2.53
BRAG	1196	A	502.50	53	3	20	578	215		D	6.6	6.6	0.005	0.005		13.61	2.90	2.53
BRAG	1196	A	503.58	53	3	128	579	216	x	D	10.7	10.7	1.080	0.734		12.88	2.87	2.53
BRAG	1196	A	504.03	53	4	33	580	217		D	6.7	6.7	0.076	0.044		13.31	2.84	2.53
BRAG	1196	A	509.48	54	1	58	581	218		D	3.8	3.8	0.020	0.011		14.30	2.96	2.53
BRAG	1196	A	519.44	55	1	94	582	219		D	21.9	21.9	3,351.000	3,244.000		11.65	2.97	2.53
BRAG	1196	A	528.45	56	1	35	583	220		D	29.4	29.4	22,828.000	22,478.000		7.73	2.18	2.53
BRAG	1196	A	528.96	56	1	86	584	221		D	27.7	27.7	867.000	820.000		7.34	2.02	2.53
BRAG	1196	A	538.30	57	1	60	585	222		D	4.7	4.7	1.920	1.360		17.85	3.73	2.53
BRAG	1196	A	538.88	57	1	118	586	223		D	13.9	13.9	0.842	0.567		11.85	2.74	2.53
BRAG	1196	A	539.47	57	2	27	588	224		D	15.8	15.8	24.600	21.000		13.42	3.17	2.53
BRAG	1196	A	541.18	57	3	55	10,001	363		D	7.6	7.6	1.840	1.300		8.87	1.94	2.51
BRAG	1196	A	547.61	58	1	31	10,002	364		D	10.2	10.2	1.370	0.947		12.80	2.88	2.51
BRAG	1196	A	548.37	58	1	107	10,003	365		D	7.6	7.6	0.077	0.045		12.80	2.80	2.51
BRAG	1196	A	557.43	59	1	53	10,004	366		D	31.3	31.3	4,077.000	3,956.000		12.13	3.57	2.51
BRAG	1196	A	557.86	59	1	96	10,005	367		D	28.6	28.6	3,031.000	2,931.000		11.22	3.20	2.50
BRAG	1196	A	576.30	61	1	10	10,006	368		D	30.3	30.3	5,680.000	5,531.000		12.02	3.72	2.43
BRAG	1196	A	577.54	61	1	134	10,007	369		D	33.1	33.1	6,977.000	6,809.000		10.32	3.07	2.53
BRAG	1196	A	577.91	61	2	24	10,008	370		D	22.6	22.6	1,011.000	961.000		12.18	3.23	2.49
BRAG	1196	A	586.07	62	1	27	10,009	371		D	20.6	20.6	633.000	595.000		10.67	2.76	2.49
BRAG	1196	A	597.47	63	2	48	10,010	372		D	33.2	33.2	6,206.000	6,049.000		9.20	3.02	2.41
BRAG	1196	A	598.13	63	2	114	10,011	373		D	13.5	13.5	115.000	103.000		10.48	2.45	2.51
BRAG	1196	A	606.14	64	1	104	589	226	x	D	20.8	20.8	598.000	562.000		11.81	2.97	2.53
BRAG	1196	A	606.81	64	2	21	590	227		D	32.2	32.2	26,062.000	25,683.000		7.85	2.36	2.50
BRAG	1196	A	607.25	64	2	65	591	228		D	22.1	22.1	6,168.000	6,011.000		13.27	3.39	2.53
BRAG	1196	A	614.93	65	1	23	592	229		D	26.2	26.2	0.234	0.146		9.48	3.16	2.53
BRAG	1196	A	615.72	65	1	102	593	230	x	D	31.6	31.6	29,781.000	29,369.000		12.65	3.68	2.53
BRAG	1196	A	617.29	65	2	110	594	231		D	0.4	0.4	0.102	0.060		14.36	3.19	2.40
BRAG	1196	A	619.34	65	4	19	595	232	x	D	18.2	18.2	103.000	91.900		12.68	3.11	2.52
BRAG	1196	A	620.11	65	4	96	596	233	x	D	7.3	7.3	0.117	0.070		12.20	2.62	2.53

Table T2 (continued).

Code	Site	Hole	Depth (mbsf)	Core	Section	Top interval (cm)	Plug	Miami	TS	Mineralogy	Porosity (%)		Gas permeability		Grain density (g/cm³)	Grain volume (cm³)	Length (cm)	Diameter (cm)
											PORC	PORX	(mD)	corrected* (mD)				
BRAG	1196	A	620.11	65	4	96	597	234		D	24.4	24.4	26,155.000	25,775.000		8.87	3.26	2.53
BRAG	1196	A	620.69	65	5	4	598	235		D	12.4	12.4	70.300	62.100		13.69	3.11	2.53
BRAG	1196	A	624.83	66	1	43	599	236	x	D	13.7	13.7	261.000	240.000		12.71	2.93	2.53
BRAG	1196	A	626.77	66	2	102	600	237		D	19.5	19.5	634.000	597.000		12.69	3.10	2.53
BRAG	1196	A	627.59	66	3	36	601	238	x	D	20.6	20.6	18.900	16.100		12.77	3.20	2.53
BRAG	1196	A	629.08	66	4	36	602	239		D	2.6	2.6	0.102	0.060		15.31	3.13	2.53
BRAG	1196	A	629.54	66	4	82	603	240	x	D	23.3	23.3	183.000	167.000		12.06	3.13	2.53
BRAG	1196	A	634.28	67	1	58	604	241		D	19.2	19.2	425.000	396.000		10.95	2.70	2.53
BRAG	1196	B	2.17	1	2	72	605	242	x	D	13.3	13.3	9.760	8.100		11.28	2.59	2.53
BRAG	1196	B	29.65	4	1	85	606	243	x	L	23.4	23.4	0.820	0.551		10.47	2.72	2.53
BRAG	1196	B	47.71	6	1	51	607	244		D	39.7	39.7	4,739.000	4,606.000		8.51	2.81	2.53
BRAG	1196	B	47.97	6	1	77	608	245		D	38.6	38.6				7.74		
BRAG	1196	B	57.89	7	1	109	609	246		D	33.7	33.7	569.000	534.000		10.62	3.19	2.53
BRAG	1196	B	59.21	7	2	91	610	247		D	35.1	35.1	3,785.000	3,669.000		9.69	2.97	2.53
BRAG	1196	B	76.31	9	1	51	611	248		D	28.8	28.8	733.000	692.000		11.81	3.30	2.53
BRAG	1196	B	85.85	10	1	105	612	249		D	31.4	31.4	1,173.000	1,118.000		8.68	2.52	2.53
BRAG	1196	B	110.85	13	1	85	613	250		D	33.8	33.8	931.000	883.000		6.99	2.10	2.53
BRAG	1196	B	116.77	14	2	62	614	251		D	25.2	25.2	2,380.000	2,293.000		15.94	4.24	2.53
BRAG	1196	B	117.35	15	1	45	615	252		D	30.0	30.0	6,629.000	6,465.000		8.09	2.30	2.53
BRAG	1196	B	119.20	16	1	100	616	253		D	21.1	21.1	812.000	769.000		15.19	3.83	2.53
BRAG	1196	B	122.93	17	1	3	617	254	x	D	46.2	46.2	50,000.000	50,000.000		9.71	3.59	0.53
BRAG	1196	B	124.33	18	1	93	618	255		D	39.5	39.5	8,402.000	8,213.000		9.79	3.22	2.53
BRAG	1196	B	125.17	18	2	31	619	256	x	D	19.2	19.2	145.000	131.000		16.54	4.07	2.53
BRAG	1196	B	140.19	22	1	49	620	257		D	37.1	37.1	274.000	252.000		9.74	3.08	2.53
BRAG	1196	B	159.44	27	1	34	622	259		D	38.8	38.8	75,681.000	74,951.000		10.24	3.33	2.53
BRAG	1196	B	164.03	28	1	23	623	260		D	12.1	12.1	33.200	28.700		16.97	3.84	2.53
BRAG	1196	B	168.70	29	1	20	624	261	x	D	30.7	30.7	5,713.000	5,564.000		14.43	4.14	2.53
BRAG	1196	B	169.96	29	2	3	625	262	x	D	13.4	13.4	2.540	1.960		18.19	4.18	2.53
BRAG	1196	B	172.80	30	1	30	626	263		D	25.1	25.1	1,059.000	1,007.000		14.73	3.91	2.53
BRAG	1196	B	174.14	30	2	20	627	264	x	D	17.3	17.3	3.600	2.860		15.97	3.84	2.53
BRAG	1196	B	177.67	31	1	47	628	265		D	39.9	39.9	13,943.000	13,685.000		11.01	3.76	2.49
BRAG	1196	B	185.15	33	1	25	629	266	x	L	12.3	12.3	0.117	0.070		16.53	3.75	2.53
BRAG	1196	B	185.65	33	1	75	630	267	x	L	13.6	13.6	0.953	0.646		12.42	2.86	2.53
BRAG	1196	B	199.03	36	1	3	631	268	x	L	8.0	8.0	2.530	1.950		15.07	3.31	2.51
BRAG	1199	A	1.35	1	1	135	632	331		D	17.5	17.5	980.000	931.000		13.89	3.35	2.53
BRAG	1199	A	3.14	1	3	26	633	332		D	19.6	19.6	699.000	659.000		11.60	2.87	2.53
BRAG	1199	A	9.92	2	1	42	634	333	x	D	23.7	23.7	15.000	12.700		14.08	3.67	2.53
BRAG	1199	A	14.88	2	4	107	635	334		D	17.6	17.6	1,372.000	1,311.000		15.07	3.64	2.53
BRAG	1199	A	17.66	3	1	26	636	335		D	17.8	17.8	3,500.000	3,390.000		12.90	3.12	2.53
BRAG	1199	A	23.08	4	3	139	637	336		D	11.1	11.1	69.000	60.900		16.63	3.72	2.53
BRAG	1199	A	26.14	4	6	16	638	337	x	D	17.1	17.1	2,642.000	2,550.000		17.51	4.20	2.53
BRAG	1199	A	28.29	5	2	1	639	338	x	D	14.9	14.9	739.000	698.000		13.39	3.13	2.53
BRAG	1199	A	31.04	5	3	130	640	339	x	D	17.2	17.2	570.000	535.000		14.03	3.37	2.53
BRAG	1199	A	33.22	5	5	61	641	340	x	D	10.6	10.6	293.000	271.000		16.41	3.65	2.53
BRAG	1199	A	33.54	5	5	93	642	341	x	D	16.4	16.4	430.000	401.000		16.64	3.96	2.53
BRAG	1199	A	38.49	6	2	129	643	342	x	D	15.1	15.1	796.000	753.000		14.90	3.49	2.53
BRAG	1199	A	38.78	6	3	8	644	343		D	9.0	9.0	1.890	1.340		14.08	3.08	2.53
BRAG	1199	A	45.37	7	1	27	645	344	x	D	10.3	10.3	126.000	114.000		16.23	3.60	2.53
BRAG	1199	A	55.06	8	1	106	646	345	x	D	18.9	18.9	1,222.000	1,165.000		13.78	3.38	2.53

Table T2 (continued).

Code	Site	Hole	Depth (mbsf)	Core	Section	Top interval (cm)	Plug	Miami	TS	Mineralogy	Porosity (%)		Gas permeability		Grain density (g/cm³)	Grain volume (cm³)	Length (cm)	Diameter (cm)
											PORC	PORX	(mD)	corrected* (mD)				
BRAG	1199	A	56.75	8	2	135	647	346		D	12.3	12.3				15.39		
BRAG	1199	A	56.97	8	3	12	648	347	x	D	21.7	21.7	4,764.000	4,631.000		15.51	3.94	2.53
BRAG	1199	A	64.72	9	1	112	649	348		D	8.4	8.4	1.140	0.784		14.41	3.13	2.53
BRAG	1199	A	66.94	9	3	44	650	349		D	9.7	9.7	4.040	3.250		9.72	2.14	2.53
BRAG	1199	A	69.32	9	5	0	651	350		D	4.9	4.9	0.065	0.037		15.73	3.29	2.53
BRAG	1199	A	71.97	9	6	123	652	351	x	D	8.6	8.6	1.680	1.180		15.53	3.38	2.53
BRAG	1199	A	75.44	10	2	74	653	352	x	D	15.3	15.3	12.600	10.600		13.42	3.15	2.53
BRAG	1199	A	80.10	10	5	104	654	353		D	11.3	11.3	145.000	131.000		14.54	3.26	2.53
BRAG	1199	A	83.87	11	1	107	655	354	x	D	5.3	5.3	0.139	0.084		17.29	3.63	2.53
BRAG	1199	A	86.65	11	3	86	656	355		D	3.9	3.9	0.137	0.083		15.32	3.17	2.53
BRAG	1199	A	94.20	12	2	22	657	356		D	3.4	3.4	0.072	0.042		16.12	3.32	2.53
BRAG	1199	A	102.25	12	7	109	658	357		D	4.1	4.1	2.660	2.060		16.73	3.47	2.53
BRAG	1199	A	102.65	13	1	55	659	358	x	D	5.5	5.5	0.072	0.042		18.05	3.80	2.53
BRAG	1199	A	105.20	13	3	43	660	359	x	D	9.2	9.2	0.106	0.063		15.51	3.40	2.53
BRAG	1193	A	292.62	51	1	112	661	11		L	40.2	40.2	51.700		2.76	7.13	24.15	25.07
BRAG	1193	A	302.44	52	1	134	662	13		L	40.2	40.2	20.900		2.79	6.07	20.81	24.93
BRAG	1193	A	315.70	54	1	20	663	14		L	41.5	41.5	53.100		2.74	8.07	28.83	24.67
BRAG	1193	A	320.58	55	CC	18	664	16		L	28.5	28.5	7.910		2.78	4.99	20.30	20.94
BRAG	1193	A	330.68	57	1	58	665	17		L	37.7	37.7	10.600		2.72	7.74	25.78	24.79
BRAG	1193	A	340.43	58	1	73	666	19		L	37.0	37.0	9.760		2.74	7.64	24.17	25.27
BRAG	1193	A	350.46	59	1	106	667	25		L	35.1	35.1	4.810		2.71	12.87	39.45	25.30
BRAG	1193	A	360.34	60	1	134	668	28		L	34.8	34.8	6.630		2.89	14.19	43.30	25.31
BRAG	1193	A	373.18	61	4	24	669	34		L	33.3	33.3	2.170		2.69	15.09	44.82	25.34
BRAG	1193	A	380.33	62	2	50	670	37		L	32.2	32.2	8.620		2.74	14.38	42.26	25.29
BRAG	1193	A	383.43	62	4	60	671	39		L	32.4	32.4	1.500		2.75	11.46	34.02	25.18
BRAG	1193	A	390.19	63	CC	15	672	42		L	36.4	36.4	18.100		2.77	8.57	26.72	25.35
BRAG	1193	A	412.18	66	1	18	673	43		L	41.9	41.9	63.400		2.87	4.62	15.85	25.28
BRAG	1194	B	148.55	6	1	15	674	98	x	L	54.5	54.5	531.000		2.85	5.91	27.56	24.49
BRAG	1194	A	160.51	20	1	21	675	100	x	L	27.0	27.0	1.820		2.83	6.33	17.19	25.34
BRAG	1194	B	169.71	8	2	61	676	102	x	L	48.2	48.2	50.800		2.80	6.88	27.47	24.82
BRAG	1194	B	187.17	10	1	37	677	103	x	L	46.4	46.4	48.900		2.72	8.98	34.07	25.02
BRAG	1194	B	196.60	11	1	20	678	105	x	L	49.9	49.9	20.100		2.69	8.71	34.72	25.25
BRAG	1194	B	206.17	12	1	17	679	106	x	L	38.1	38.1	14.700		2.79	9.76	31.29	25.34
BRAG	1194	B	237.89	15	3	3	680	108	x	L			11.900				29.95	25.15
BRAG	1194	B	256.50	17	2	143	681	110	x	L	29.8	29.8	7.810		2.76	10.20	28.79	25.36
BRAG	1194	B	283.22	20	1	22	682	111	x	L	41.0	41.0	16.100		2.77	6.31	21.84	24.98
BRAG	1194	B	303.03	22	1	83	683	112	x	L	43.6	43.6	44.200		2.76	7.71	27.29	25.25
BRAG	1194	B	323.73	24	2	73	684	113	x	L	34.3	34.3	5.830		2.69	10.68	32.99	25.05
BRAG	1194	B	352.93	27	3	27	685	115	x	L			9.740				34.52	25.02
BRAG	1194	B	362.33	28	2	122	686	116	x	L	32.8	32.8	3.290		2.72	11.77	34.71	25.35
BRAG	1194	B	372.67	29	3	71	687	118	x	L	32.5	32.5	0.590		2.69	15.20	44.69	25.34
BRAG	1194	B	380.04	30	1	84	688	120	x	L	32.4	32.4	4.240		2.74	11.34	33.31	25.32
BRAG	1194	B	389.57	31	1	77	689	122	x	L	34.8	34.8	5.670		2.76	8.90	27.13	25.31
BRAG	1194	B	399.52	32	2	1	690	123	x	L	28.0	28.0	0.720		2.73	12.51	34.38	25.38
BRAG	1194	B	409.75	33	2	80	691	124	x	L	32.2	32.2	6.610		2.75	11.20	32.75	25.34
BRAG	1194	B	419.22	34	2	24	692	126	x	L	32.1	32.1	5.290		2.77	9.74	28.47	25.33
BRAG	1195	B	347.59	37	4	79	693	129		L			146.000				29.24	25.02
BRAG	1195	B	362.30	39	1	80	694	130		L	45.0	45.0	29.000		2.75	8.38	30.54	25.20
BRAG	1195	B	371.85	40	1	65	695	131		L	38.3	38.3	2.320		2.72	8.01	26.05	25.19

Table T2 (continued).

Code	Site	Hole	Depth (mbsf)	Core	Section	Top interval (cm)	Plug	Miami	TS	Mineralogy	Porosity (%)		Gas permeability		Grain density (g/cm³)	Grain volume (cm³)	Length (cm)	Diameter (cm)
											PORC	PORX	(mD)	corrected* (mD)				
BRAG	1195	B	376.15	40	4	45	696	132		L			0.480				22.05	24.66
BRAG	1195	B	391.06	42	1	46	697	133		L	41.9	41.9	0.930		2.72	5.81	20.12	25.16
BRAG	1195	B	412.18	44	2	86	698	135		L	36.8	36.8	0.340		2.67	8.65	27.45	25.21
BRAG	1195	B	421.57	45	2	57	699	137		L			3.140				25.02	24.69
BRAG	1195	B	425.91	45	5	41	700	138		L			0.740				24.10	25.27
BRAG	1195	B	430.61	46	2	31	701	139		L	32.1	32.1	0.860		2.72	9.47	27.94	25.21
BRAG	1195	B	436.32	46	6	2	702	140		L	34.8	34.8	0.860		2.76	7.62	23.30	25.28
BRAG	1195	B	440.62	47	2	32	703	141		L	32.3	32.3	0.170		2.75	8.10	23.95	25.24
BRAG	1195	B	445.02	47	5	45	704	142		L	31.2	31.2	0.560		2.77	9.38	27.26	25.24
BRAG	1195	B	451.73	48	3	33	705	143		L	39.9	39.9	0.780		2.74	8.54	28.84	25.06
BRAG	1195	B	455.40	48	5	100	706	144		L	41.5	41.5	9.830		2.77	8.94	30.35	25.32
BRAG	1197	B	380.66	35	3	60	707	270	x	L	43.3	43.3	93.900		2.84	7.08	25.31	25.07
BRAG	1197	B	390.46	36	3	105	708	271	x	L			13.300				25.40	25.20
BRAG	1197	B	397.50	37	1	120	709	272	x	L	28.4	28.4	1.860		2.77	13.22	36.66	25.32
BRAG	1197	B	410.57	38	4	65	710	273	x	L	20.1	20.1	29.400		2.76	15.83	39.19	25.38
BRAG	1197	B	418.07	39	2	114	711	275	x	L			0.180				34.70	25.15
BRAG	1197	B	424.10	39	7	39	712	277	x	L	33.7	33.7	4.660		2.76	11.24	33.56	25.37
BRAG	1197	B	429.38	40	4	46	713	279	x	L			0.380				30.91	25.35
BRAG	1197	B	437.46	41	3	8	714	280	x	L			0.920				25.33	25.33
BRAG	1197	B	464.60	44	1	100	715	281	x	L			0.380				45.72	25.32
BRAG	1197	B	472.18	44	7	74	716	282	x	L	33.7	33.7	0.280		2.72	18.18	54.48	25.31
BRAG	1197	B	477.28	45	4	27	717	285	x	L	34.6	34.6	1.350		2.74	13.81	41.94	25.32
BRAG	1197	B	488.36	46	4	127	718	286	x	L	24.0	24.0	0.120		2.71	15.08	39.41	25.32
BRAG	1197	B	492.16	46	7	75	719	288	x	L	23.9	23.9	0.560		2.73	14.84	38.70	25.33
BRAG	1197	B	499.91	47	6	50	720	290	x	L	32.6	32.6	5.020		2.76	11.15	32.80	25.34
BRAG	1197	B	507.24	48	4	96	721	291	x	L	24.4	24.4	0.730		2.75	9.83	25.75	25.36
BRAG	1197	B	512.57	49	1	97	722	292	x	L	30.5	30.5	0.100		2.68	11.24	32.11	25.33
BRAG	1197	B	523.56	50	2	86	723	293	x	L	31.8	31.8	0.680		2.72	11.44	33.22	25.35
BRAG	1197	B	531.69	51	1	89	724	295	x	L	24.1	24.1	0.310		2.73	14.65	38.21	25.36
BRAG	1197	B	544.35	52	3	90	725	297	x	L	27.6	27.6	0.060		2.73	11.98	32.94	25.29
BRAG	1197	B	551.26	53	1	116	726	299	x	L	34.8	34.8	4.350		2.75	9.19	28.04	25.30
BRAG	1198	B	407.49	23	1	29	727	311		L			0.220				30.42	24.94
BRAG	1198	B	412.77	23	5	4	728	312		L			0.810				26.49	24.92
BRAG	1198	B	417.37	24	1	57	729	313		L	35.8	35.8	7.190		2.76	8.82	27.41	25.26
BRAG	1198	B	421.00	24	3	125	730	315		L			1.890				23.06	24.87
BRAG	1198	B	428.47	25	2	57	731	316		L	40.4	40.4	0.400		2.70	7.72	26.13	25.13
BRAG	1198	B	435.80	25	7	40	732	318		L	29.8	29.8	0.780		2.74	9.09	25.73	25.32
BRAG	1198	B	442.43	26	5	43	733	320		L	40.5	40.5	3.090		2.70	8.24	27.63	25.27
BRAG	1198	B	452.56	27	6	10	734	322		L	30.4	30.4	1.720		2.70	7.87	22.47	25.32
BRAG	1198	B	458.76	28	3	61	735	324		L	20.9	20.9	0.300		2.75	9.12	22.87	25.35
BRAG	1198	B	465.34	29	1	44	736	325		L	33.7	33.7	2.770		2.68	8.47	25.52	25.25
BRAG	1198	B	475.34	30	1	74	737	326		L	30.3	30.3	0.150		2.69	10.20	29.41	25.18
BRAG	1198	B	480.80	30	5	69	738	327		L	29.1	29.1	0.160		2.69	10.64	30.17	25.16
BRAG	1198	B	486.40	31	2	130	739	328		L	36.9	36.9	0.610		2.71	10.47	33.13	25.26

Notes: BRAG = vertical plugs. Miami = University of Miami sample number. TS: x = thin section made. Mineralogy: C = calcite, D = dolomite, M = mixed calcite + dolomite. PORC = porosity calculated using plug volume measured by caliper, PORX = recommended porosity value. * = Klinkenberg-corrected gas permeability. This table is also available in **ASCII.**

Table T3. Whole-core sample data.

Code	Site	Hole	Depth (mbsf)	Core	Section	Top interval (cm)	Plug	TS	Mineralogy	Porosity (%)		Gas permeability		Pore volume (cm^3)	Length (cm)	Diameter (cm)
										PORC	PORX	(mD)	corrected* (mD)			
EHWR	1196	A	38.58	005R	01WR	38	W1	x	L	23.0	23.0	8.732	7.257	34.69	5.83	5.74
EHWR	1196	A	58.57	007R	02WR	26	W2	x	D	31.2	31.2	22,360.000	2,310.000	54.84	6.82	5.73
EHWR	1196	A	77.54	009R	02WR	2	W3	x	D	29.4	29.4	1,980.000	1,940.000	53.11	6.89	5.78
EHWR	1196	A	117.31	013R	02WR	111	W4	x	D	22.2	22.2	6,300.000	6,220.000	39.02	7.02	5.64
EHWR	1196	A	165.46	018R	02WR	130	W5	x	D	20.8	20.8	1,750.000	1,710.000	38.70	7.20	5.74
EHWR	1196	A	175.41	019R	03WR	21	W6	x	D	26.1	26.1	1,020.000	995.903	40.49	6.07	5.70
EHWR	1196	A	413.31	044R	01WR	61	W7	x	D	27.0	27.0	4,990.000	4,920.000	43.02	6.24	5.70
EHWR	1196	A	482.49	051R	02WR	101	W8	x	D	9.5	9.5	6.724	5.885	17.14	7.11	5.68
EHWR	1196	A	502.88	053R	03WR	58	W9	x	D	6.8	6.8	0.246	0.154	10.01	5.77	5.70
EHWR	1196	A	529.03	056R	01WR	93	W10	x	D	17.6	17.6	3,630.000	3,580.000	32.38	7.03	5.77
EHWR	1196	A	539.56	057R	02WR	36	W11	x	D	14.5	14.5	145.000	136.789	37.68	10.19	5.70
EHWR	1196	A	615.86	065R	01WR	116	W12	x	D	21.0	21.0	3,490.000	3,430.000	43.66	7.88	5.80
EHWR	1196	A	625.08	066R	01WR	68	W13	x	D	16.3	16.3	137.526	129.824	37.14	8.95	5.70
EHWR	1196	B	110.68	013Z	01WR	68	W14	x	D	33.1	33.1	2,880.072	2,830.000	100.62	6.05	8.00
EHWR	1196	B	169.07	029Z	01WR	57	W15	x	D	33.5	33.5	6,710.000	6,630.000	111.46	6.62	8.00
EHWR	1196	B	178.43	031Z	01WR	123	W16	x	D	23.2	23.2	3,430.000	3,380.000	70.34	6.03	8.00
EHWR	1199	A	11.76	002R	02WR	89	W17	x	D	28.5	28.5	3,660.000	3,610.000	65.96	9.08	5.70
EHWR	1199	A	28.58	005R	02WR	30	W18	x	D	17.1	17.1	256.786	245.514	38.46	8.68	5.74
EHWR	1199	A	45.56	007R	01WR	46	W19	x	D	11.0	11.0	47.622	43.549	25.56	9.12	5.70
EHWR	1199	A	72.37	009R	07WR	15	W20	x	D	10.6	10.6	16.620	14.344	23.76	8.57	5.77
EHWR	1199	A	106.51	013R	04WR	30	W21	x	D	4.0	4.0	0.733	0.489	8.97	8.73	5.72
EHWR	1199	A	136.52	016R	04WR	113	W22	x	D	13.2	13.2	545.957	528.141	35.70	10.60	5.71
EHWR	1199	A	151.08	018R	01WR	88	W23	x	D	19.9	19.9	1,670.000	1,640.000	52.08	10.26	5.70

Notes: EHWR = whole-core samples. The plug number indicates the photomicrograph number in Pl. AP2, p. 171. TS: x = thin section made. Mineralogy: C = calcite, D = dolomite, M = mixed calcite + dolomite. PORC = porosity calculated using plug volume measured by caliper, PORX = recommended porosity values. * = Klinkenberg-corrected gas permeability. This table is also available in ASCII.

Plate AP1. Photomicrographs of horizontal plugs selected for thin sectioning. (Continued on next 140 pages.)

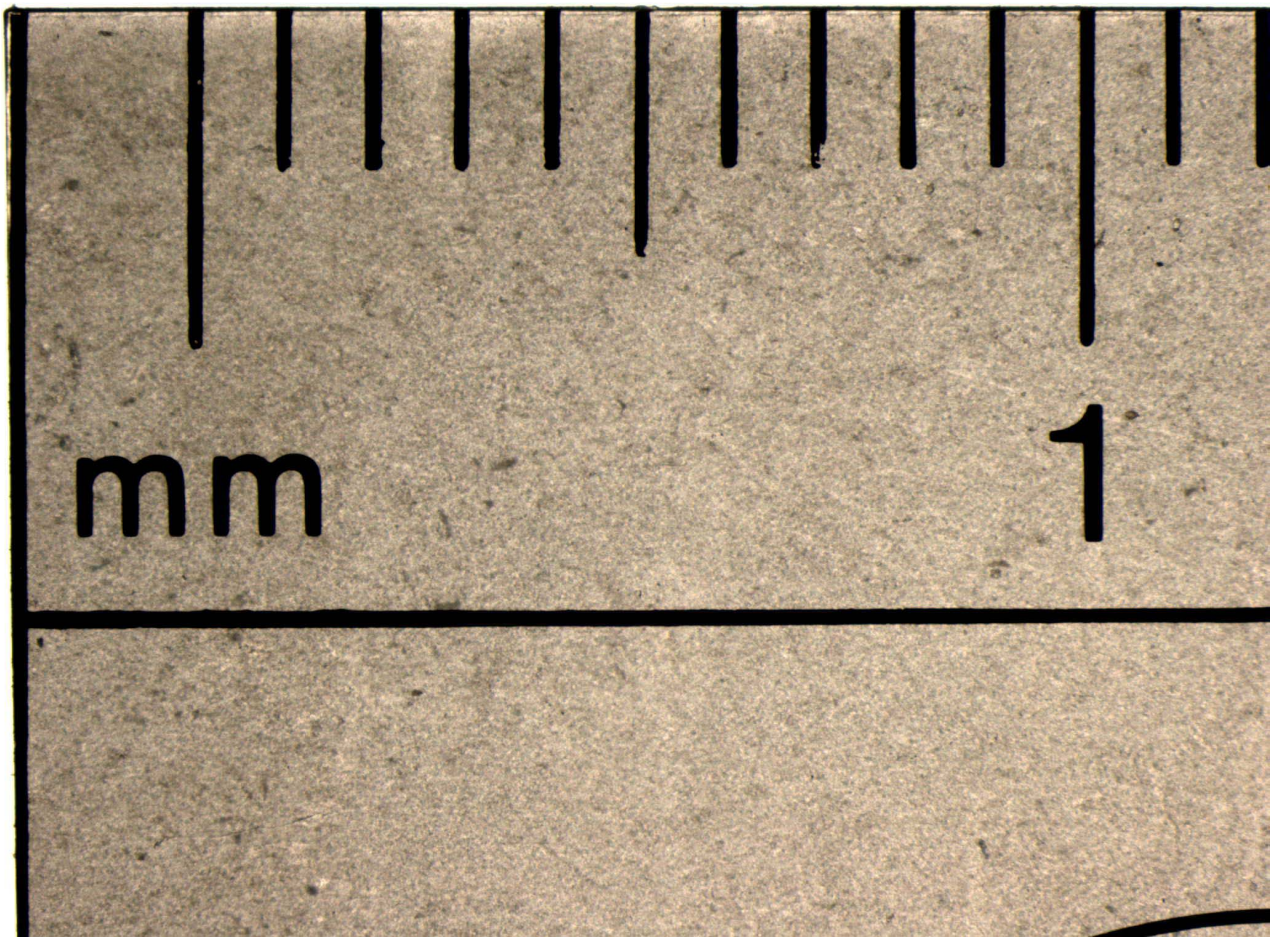


Plate AP1 (continued).

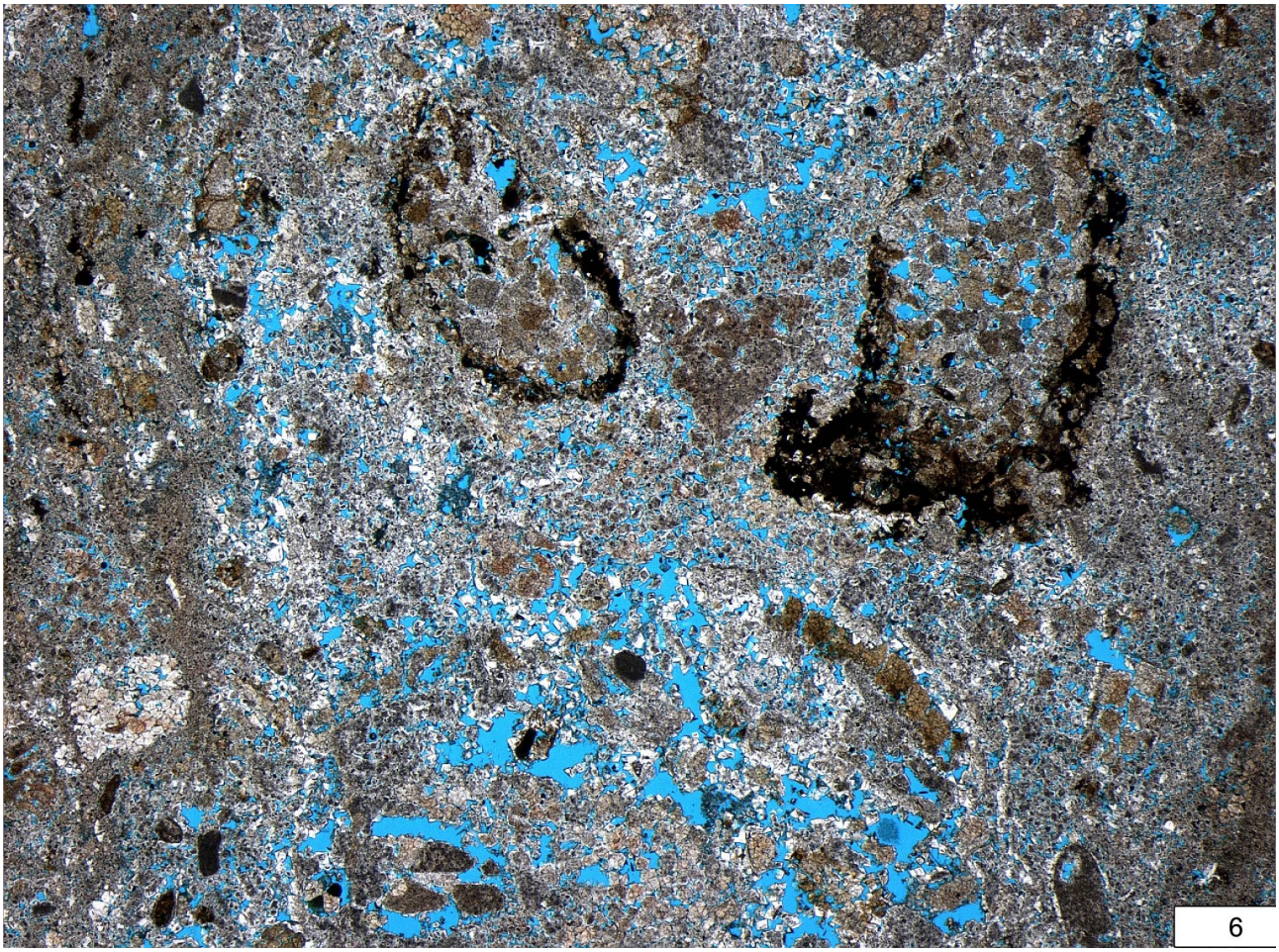


Plate AP1 (continued).

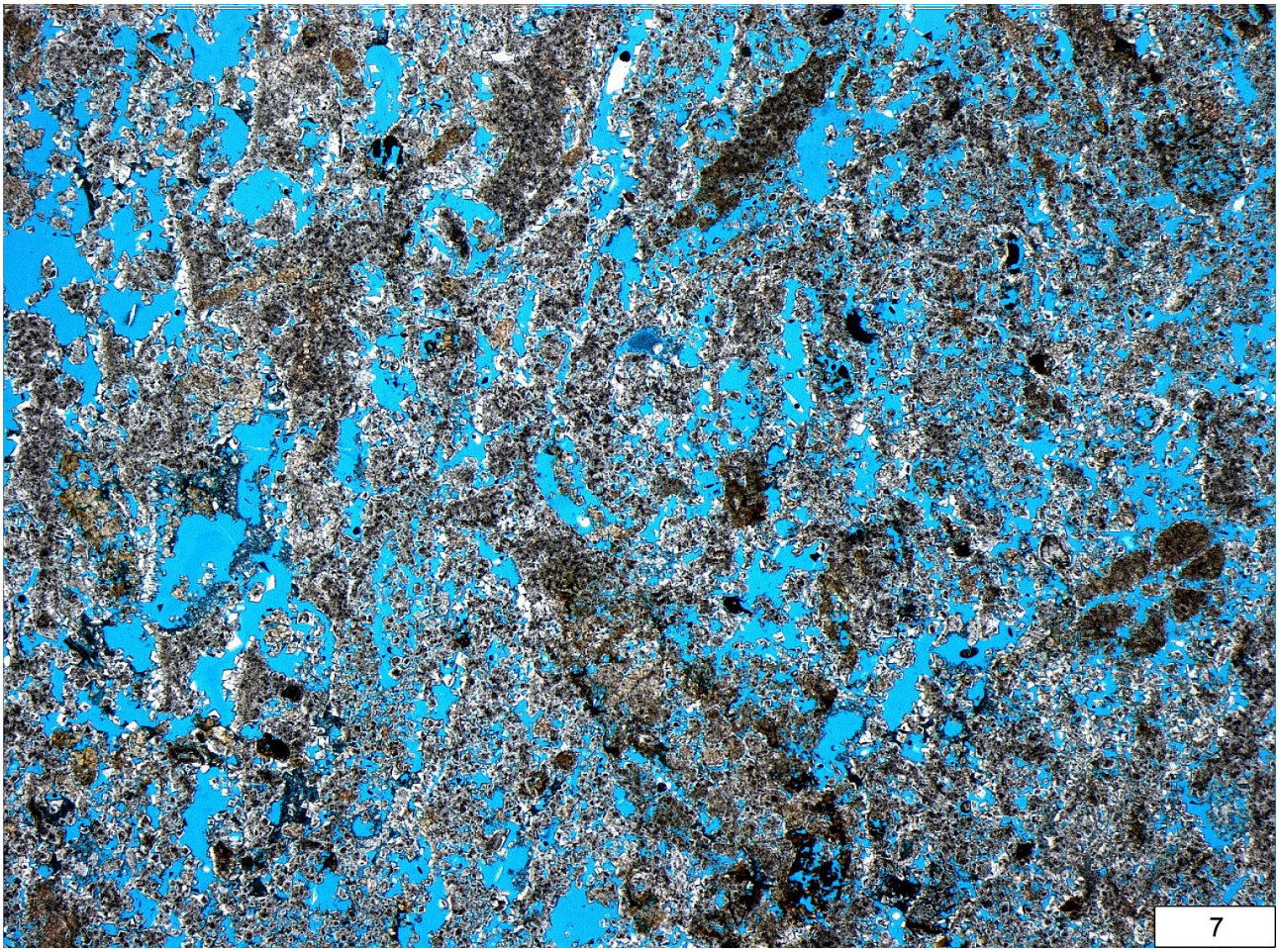


Plate AP1 (continued).

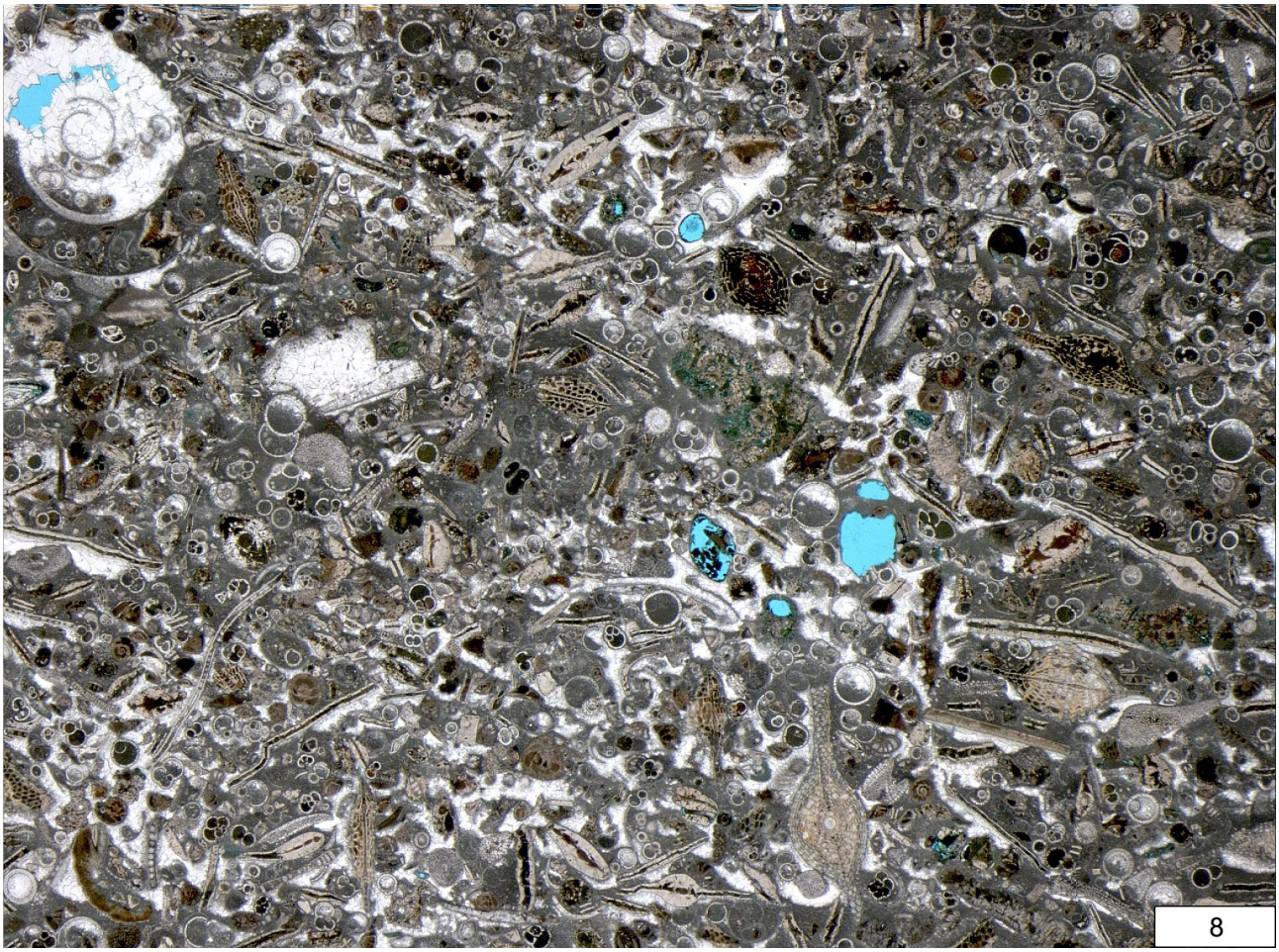


Plate AP1 (continued).

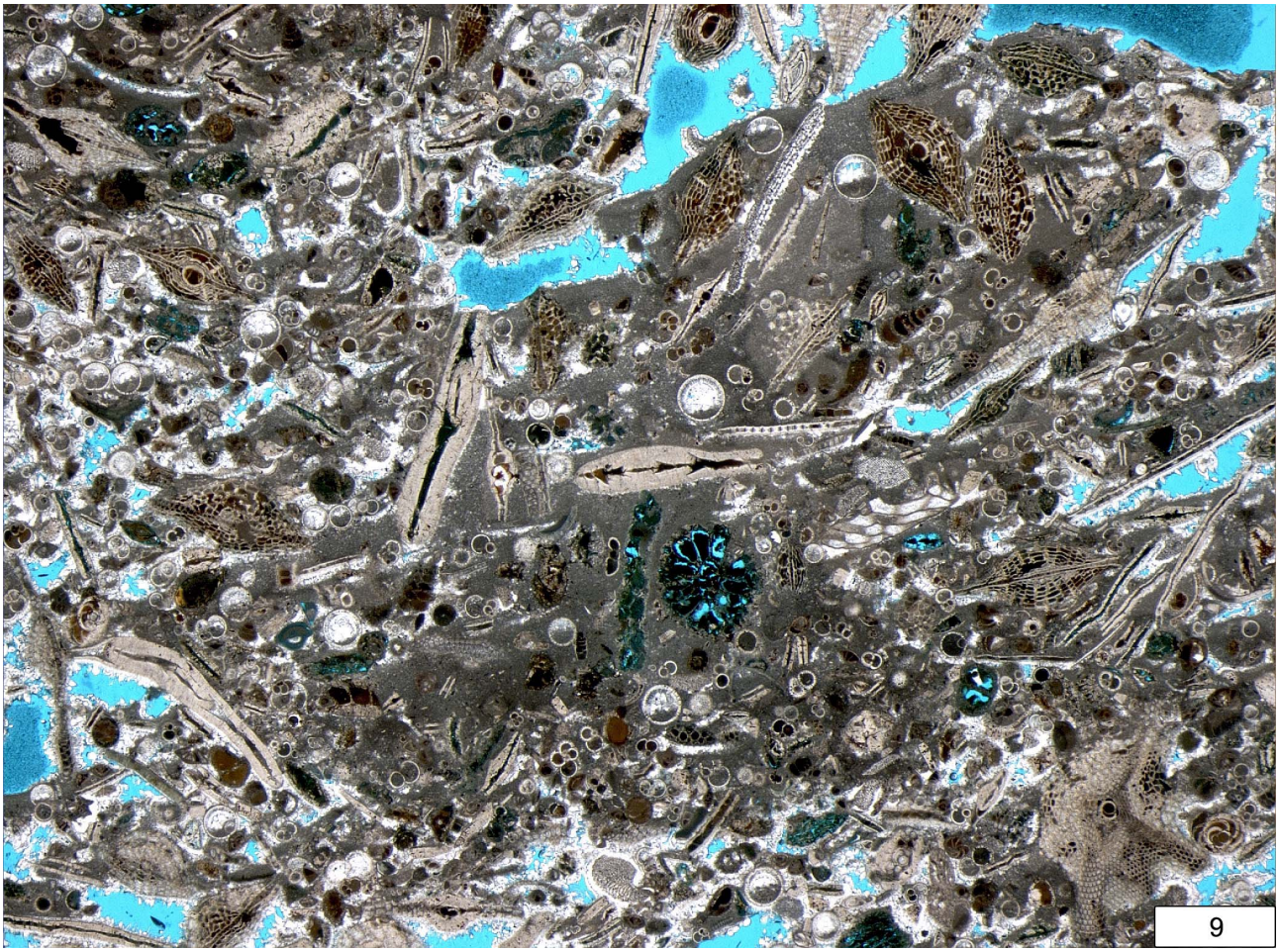


Plate AP1 (continued).

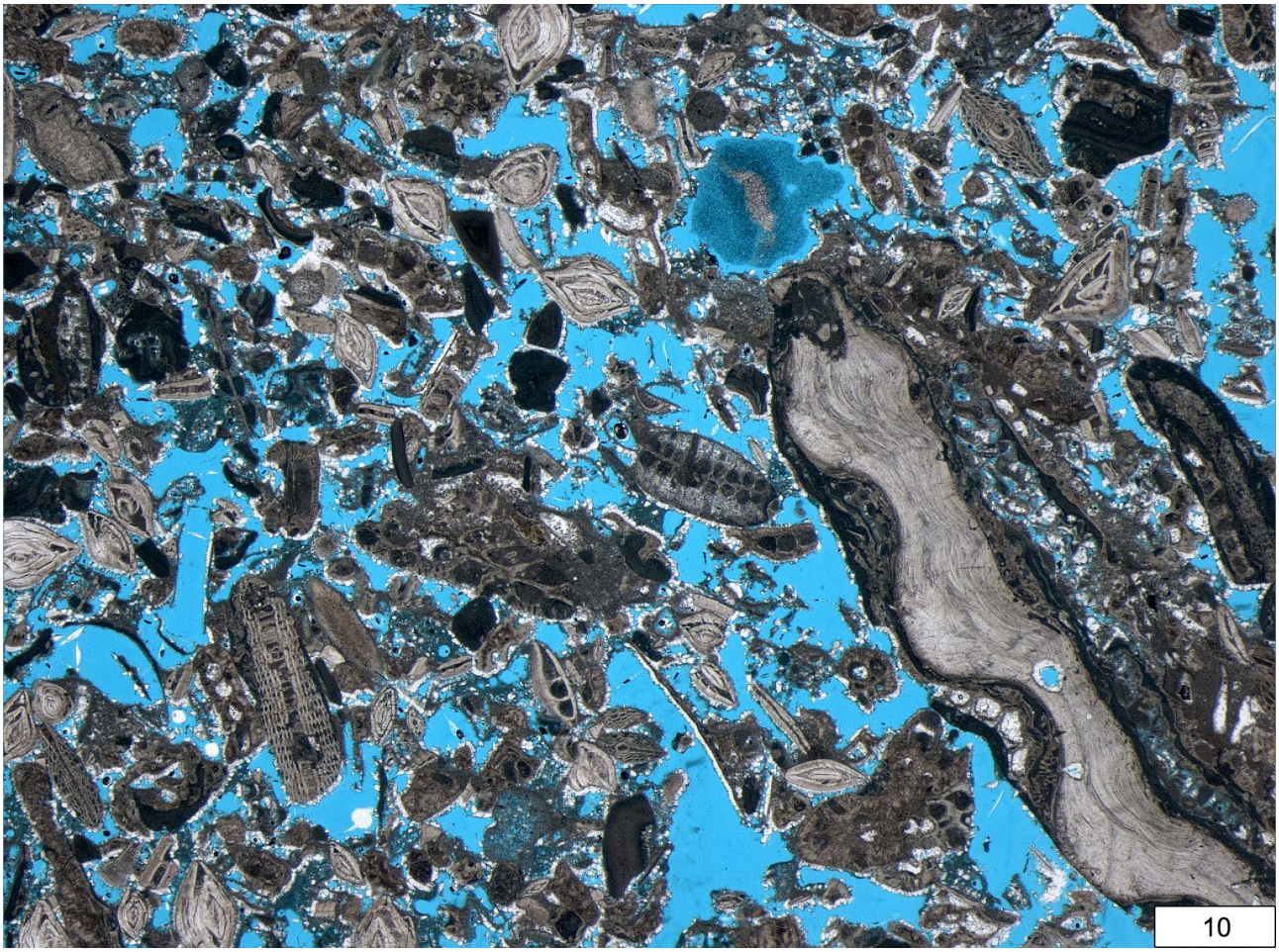
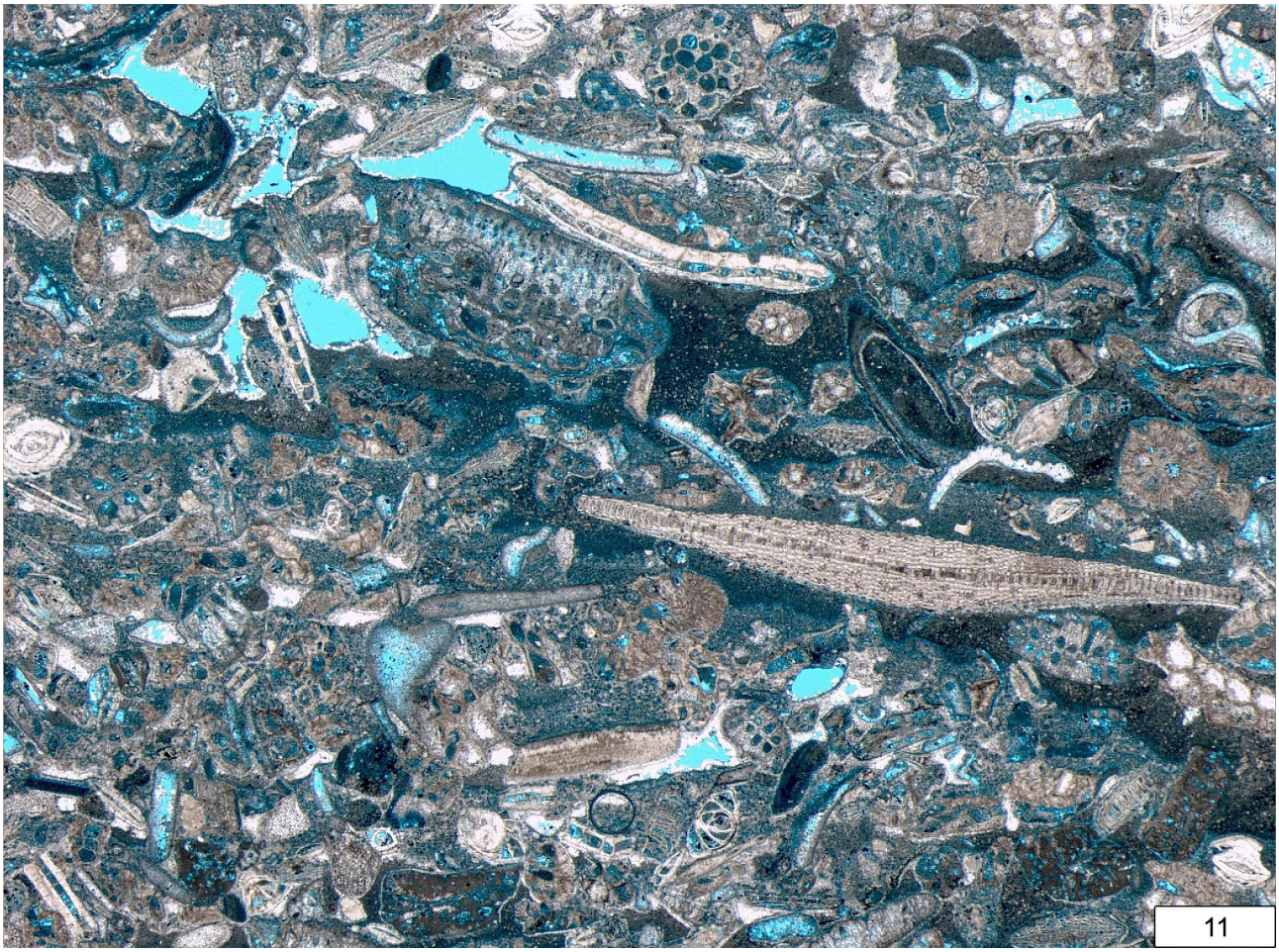


Plate AP1 (continued).



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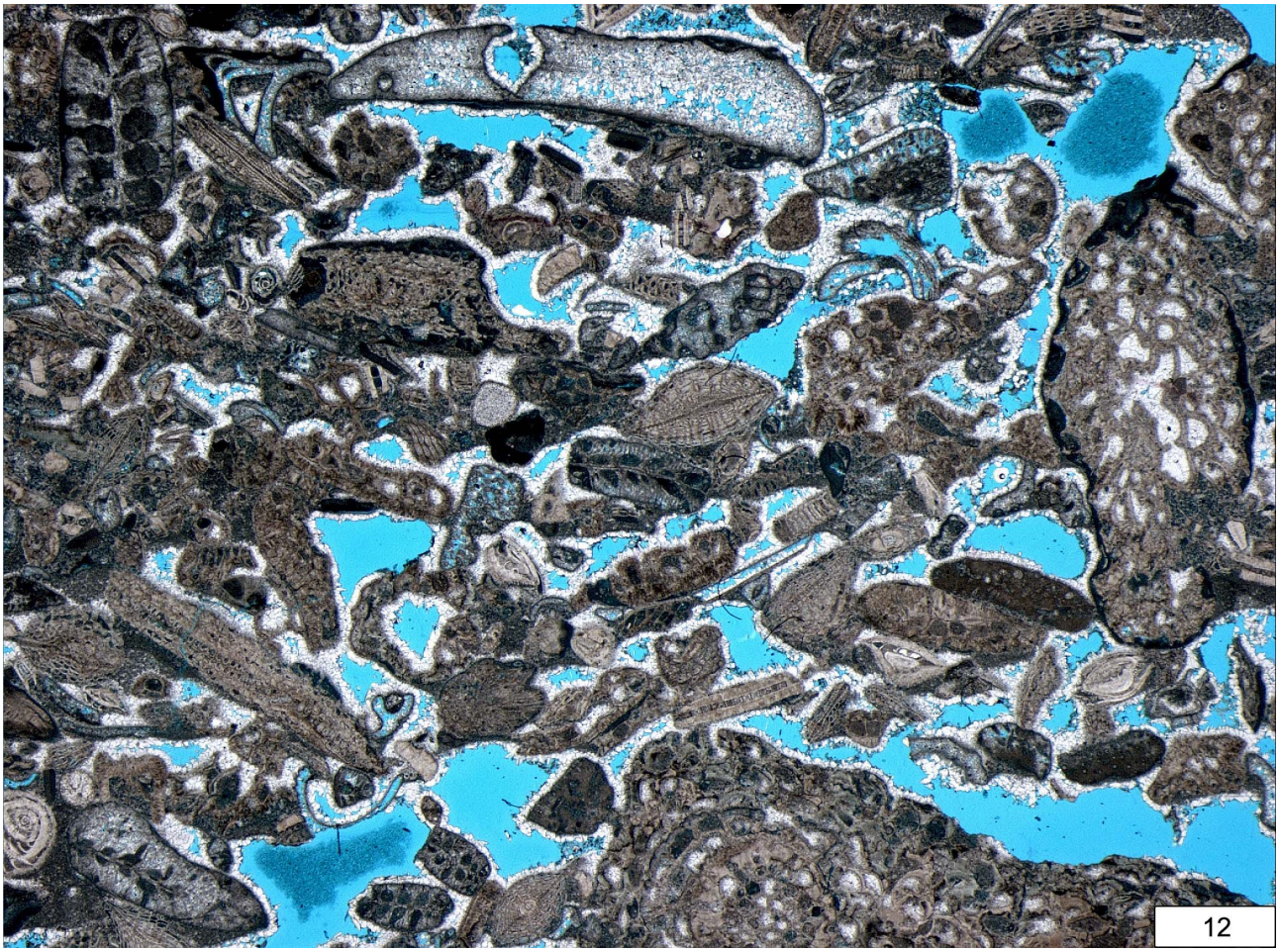

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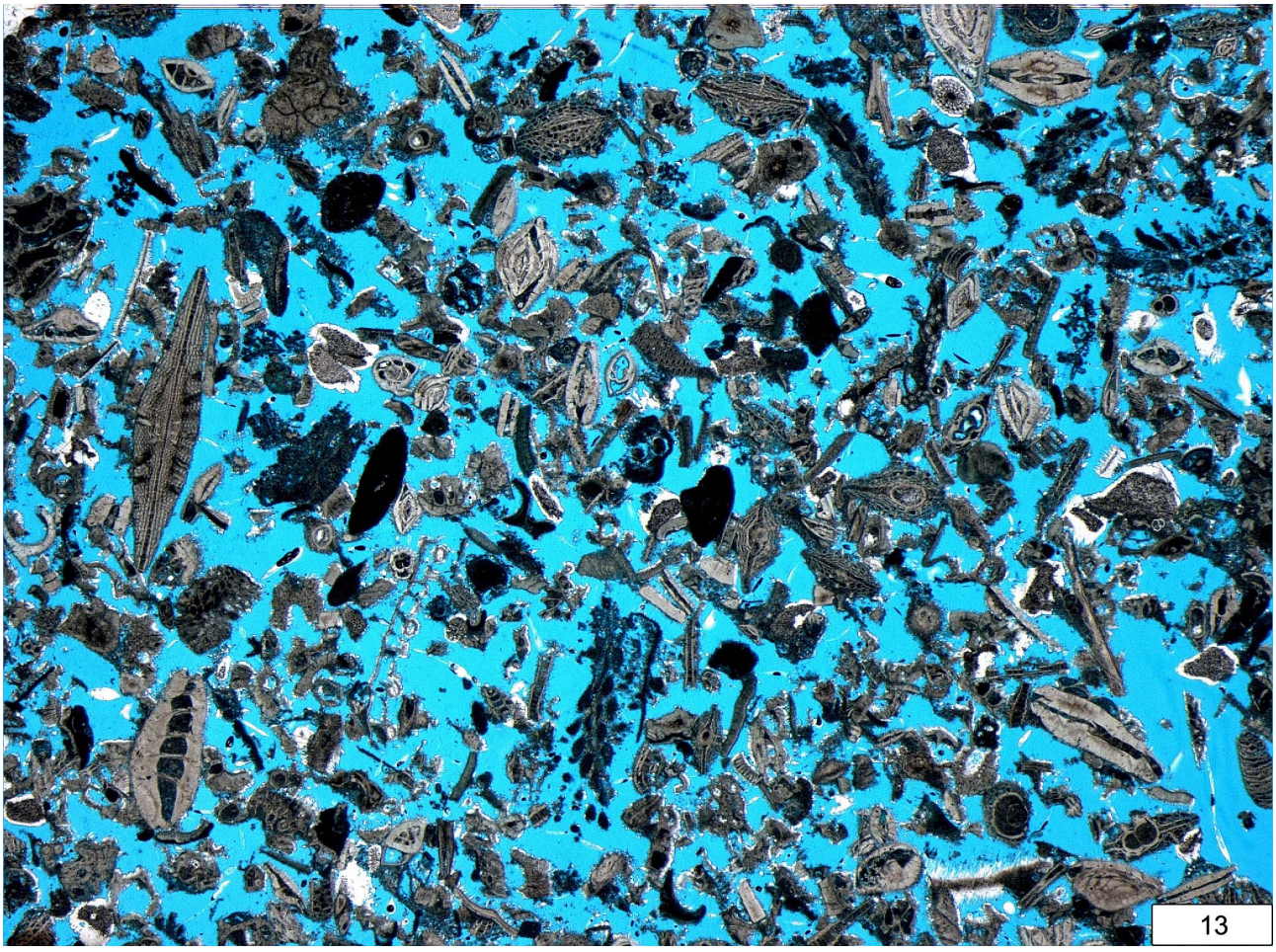
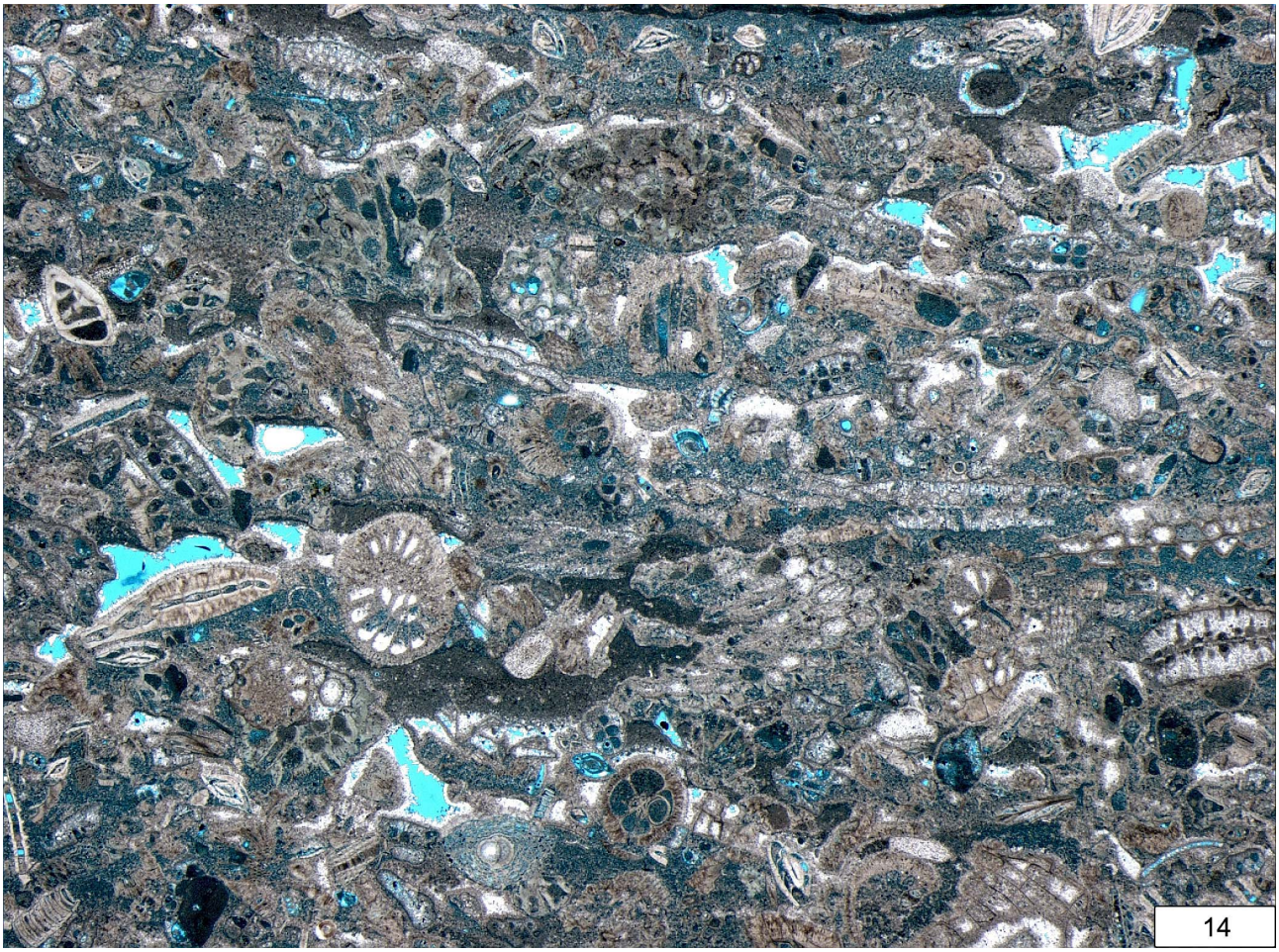


Plate AP1 (continued).



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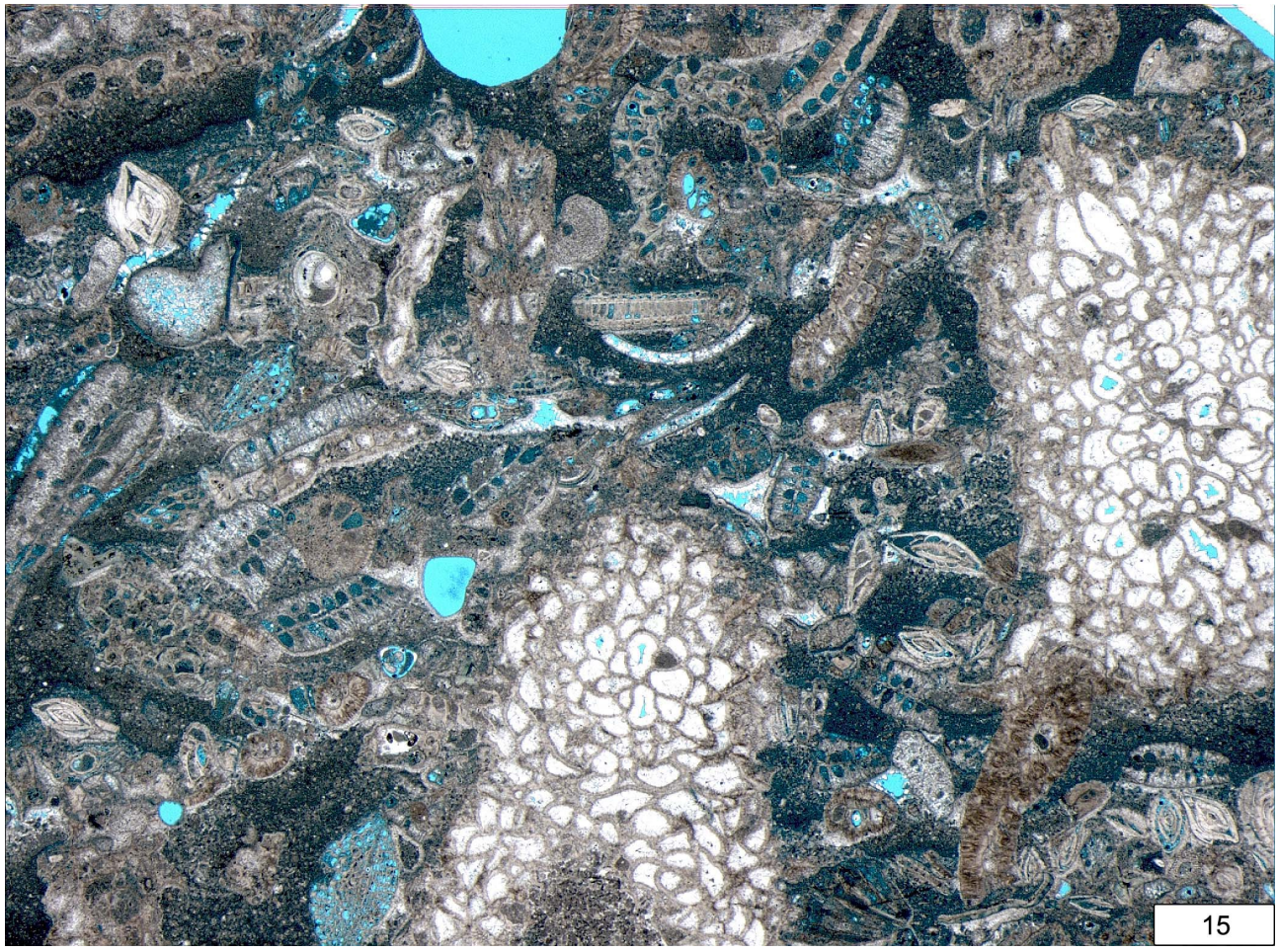


Plate AP1 (continued).

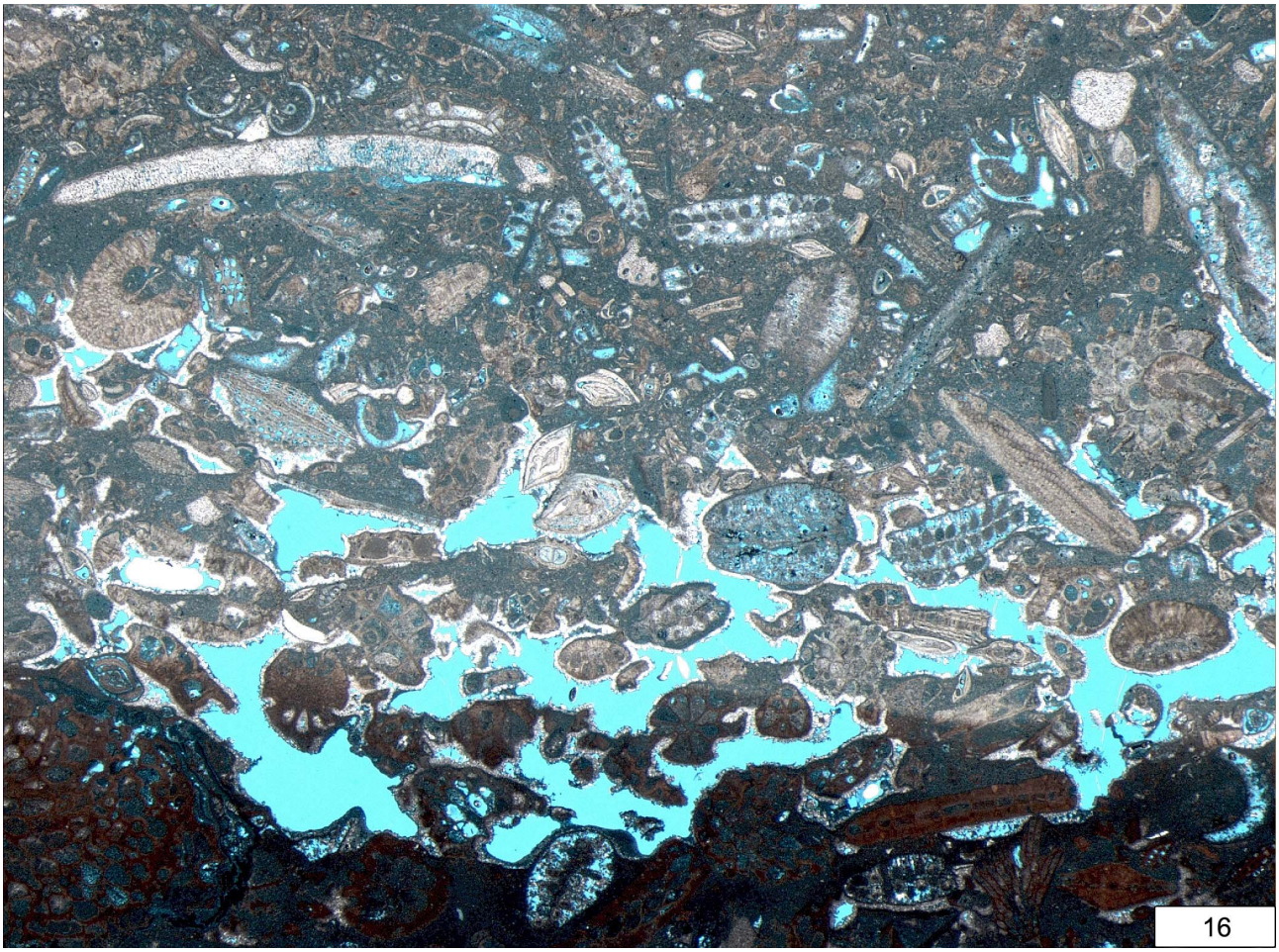


Plate AP1 (continued).

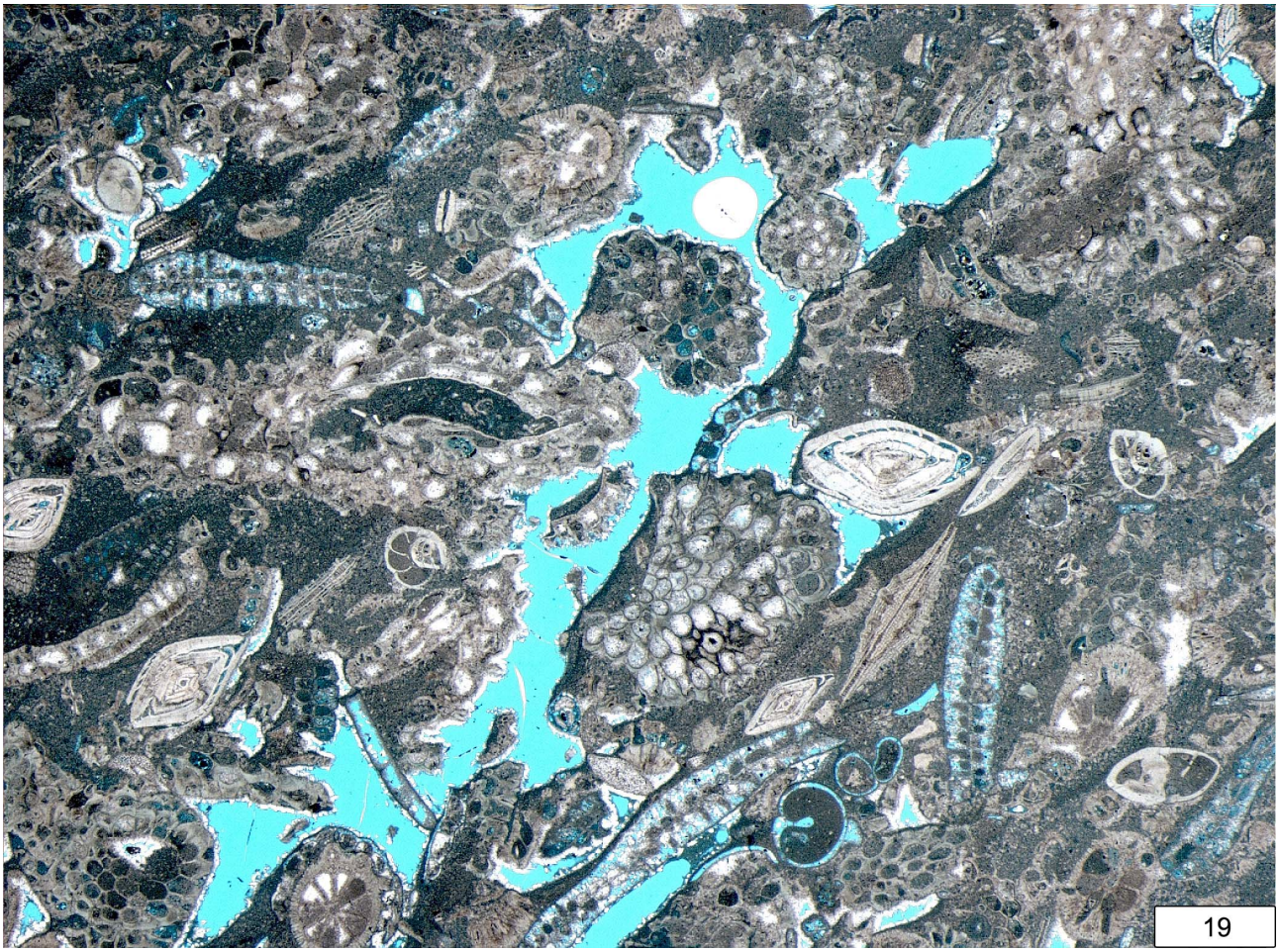


Plate AP1 (continued).

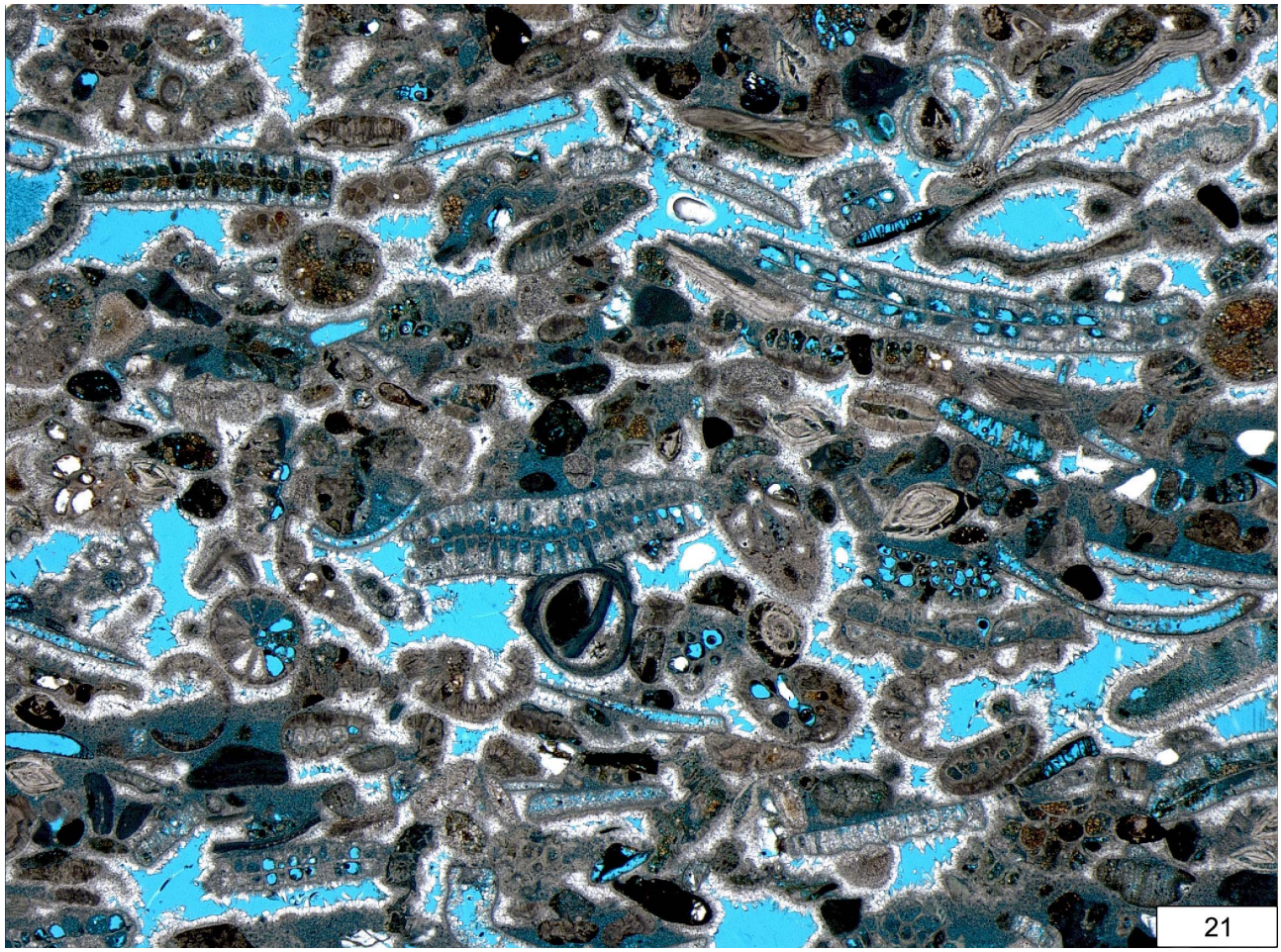


Plate AP1 (continued).

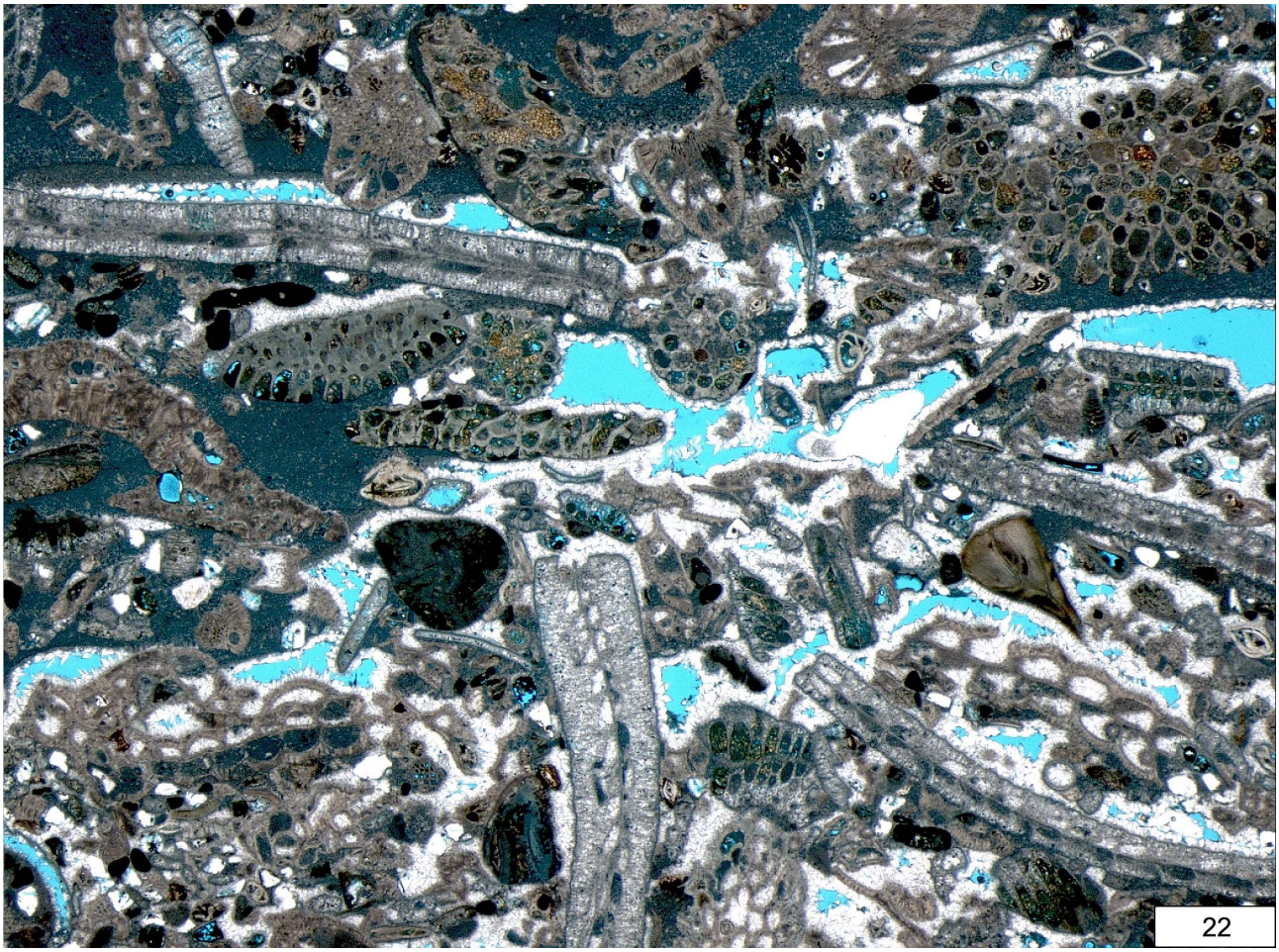
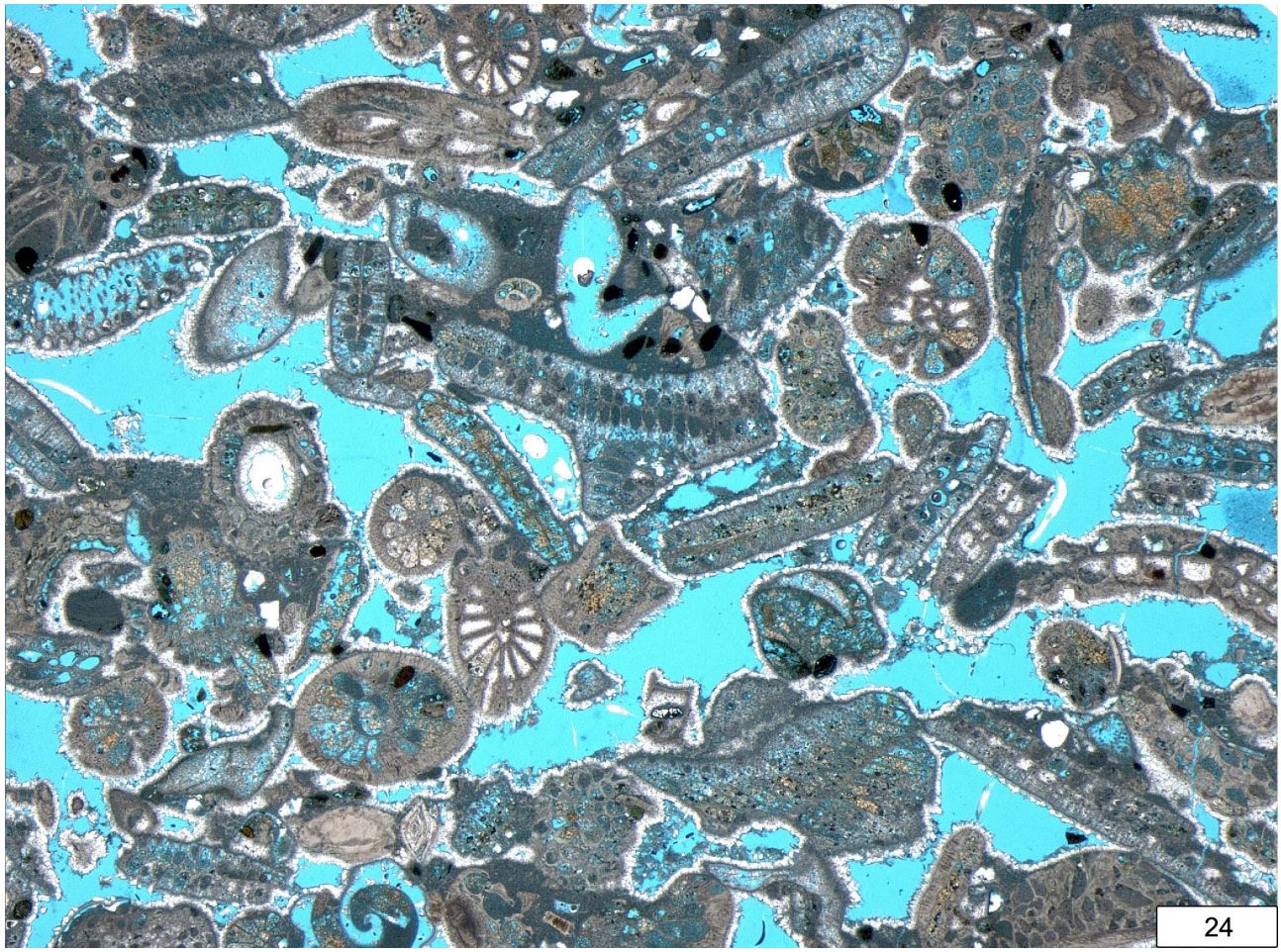


Plate AP1 (continued).



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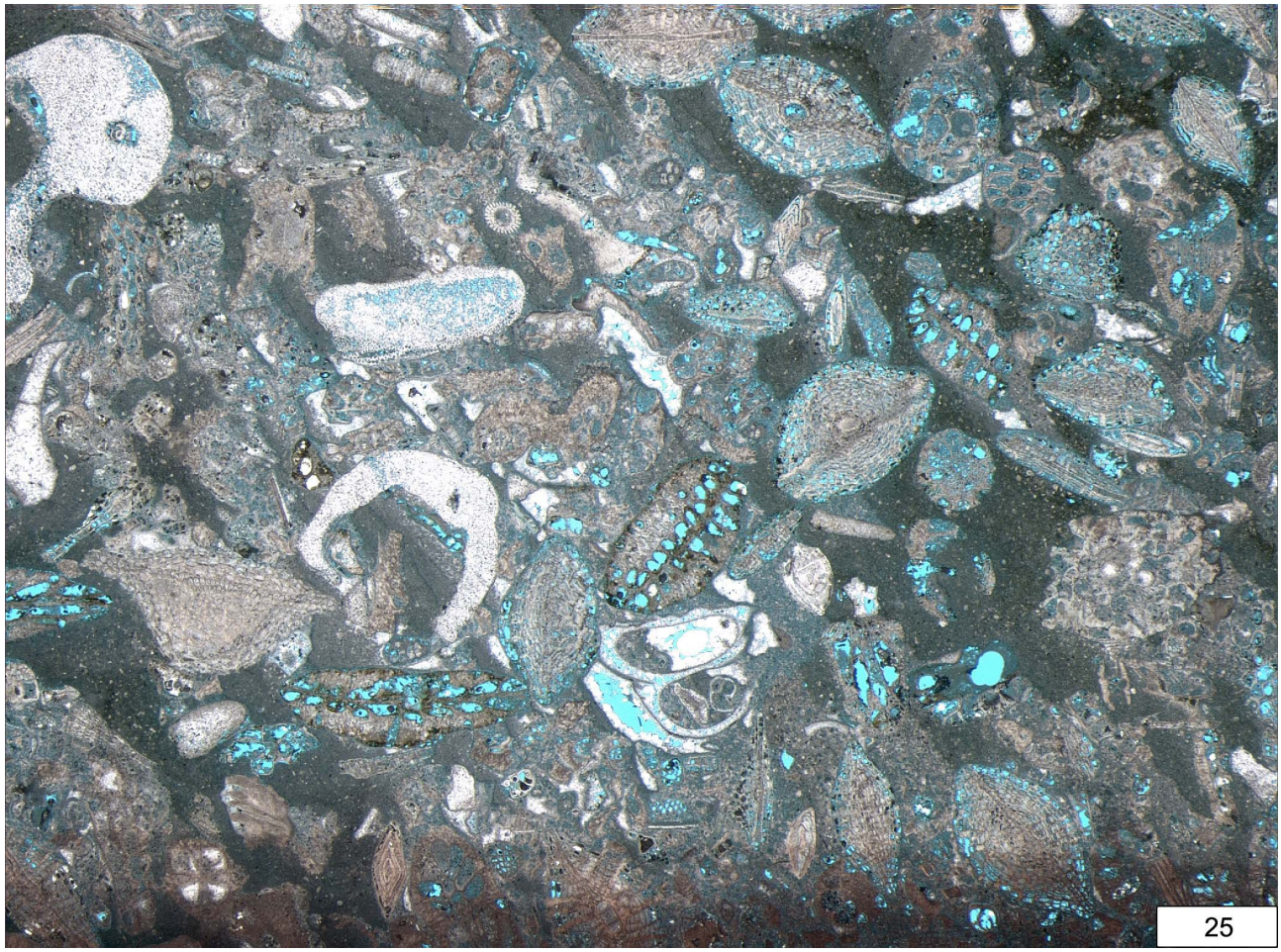

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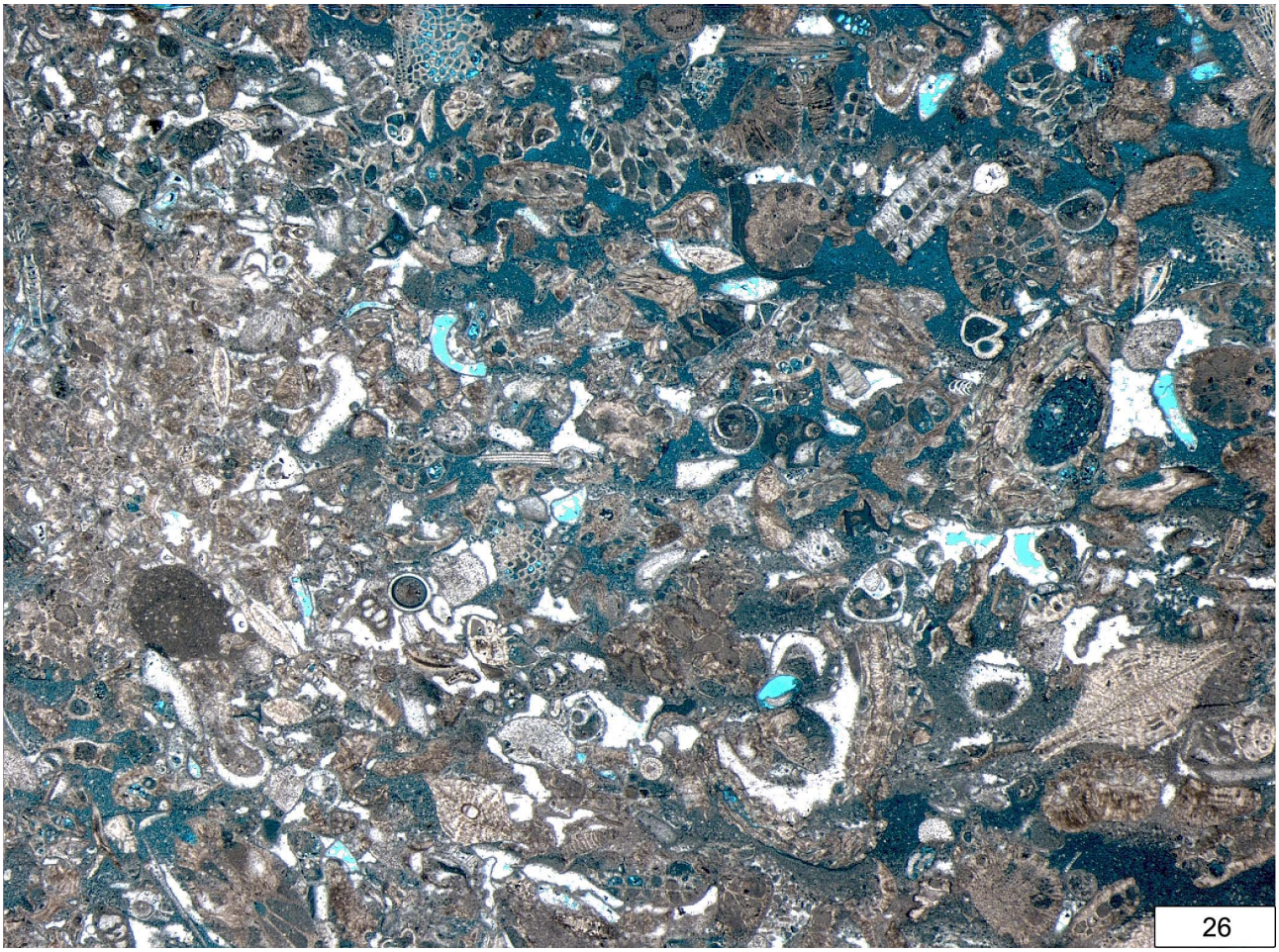

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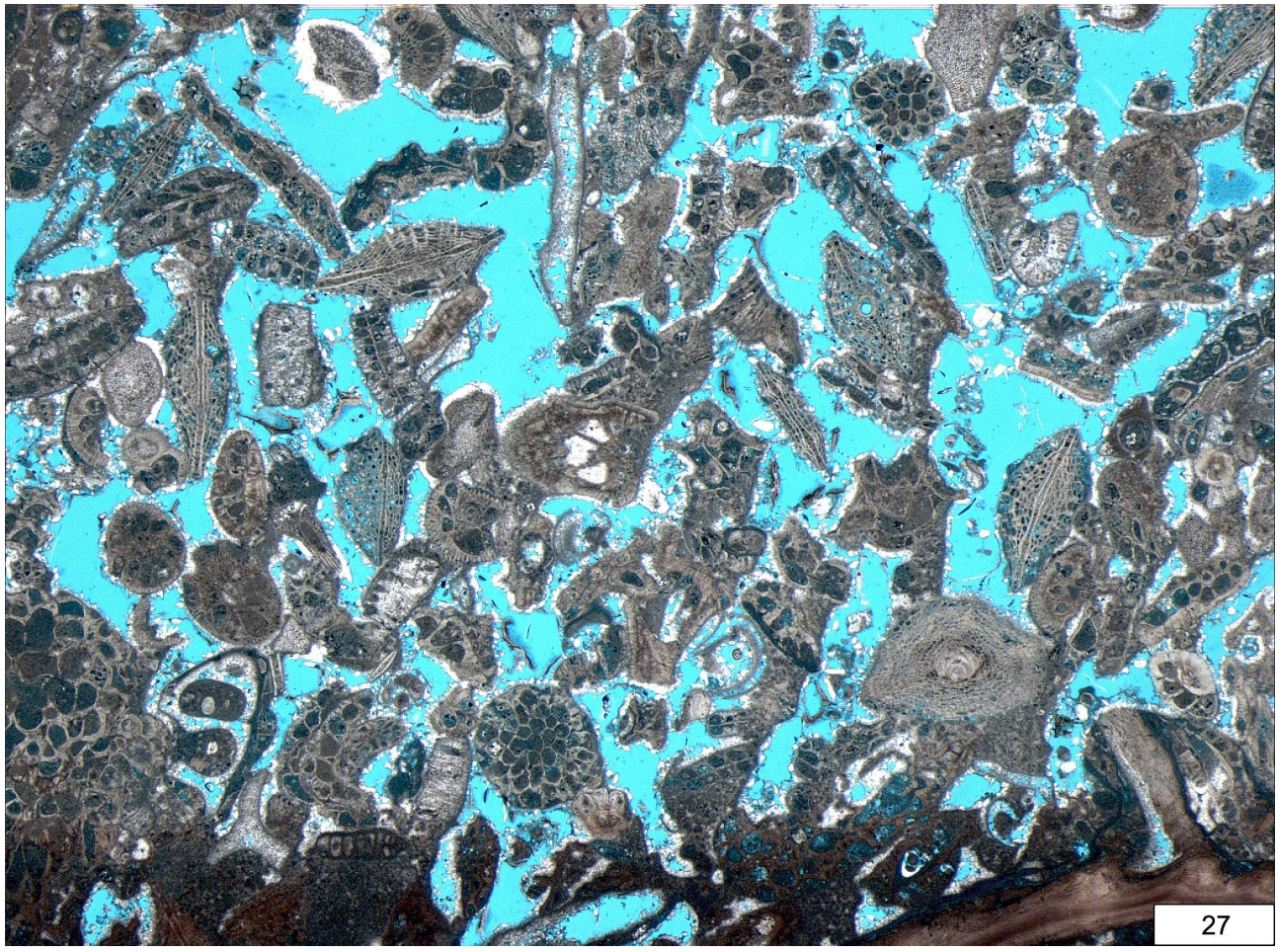

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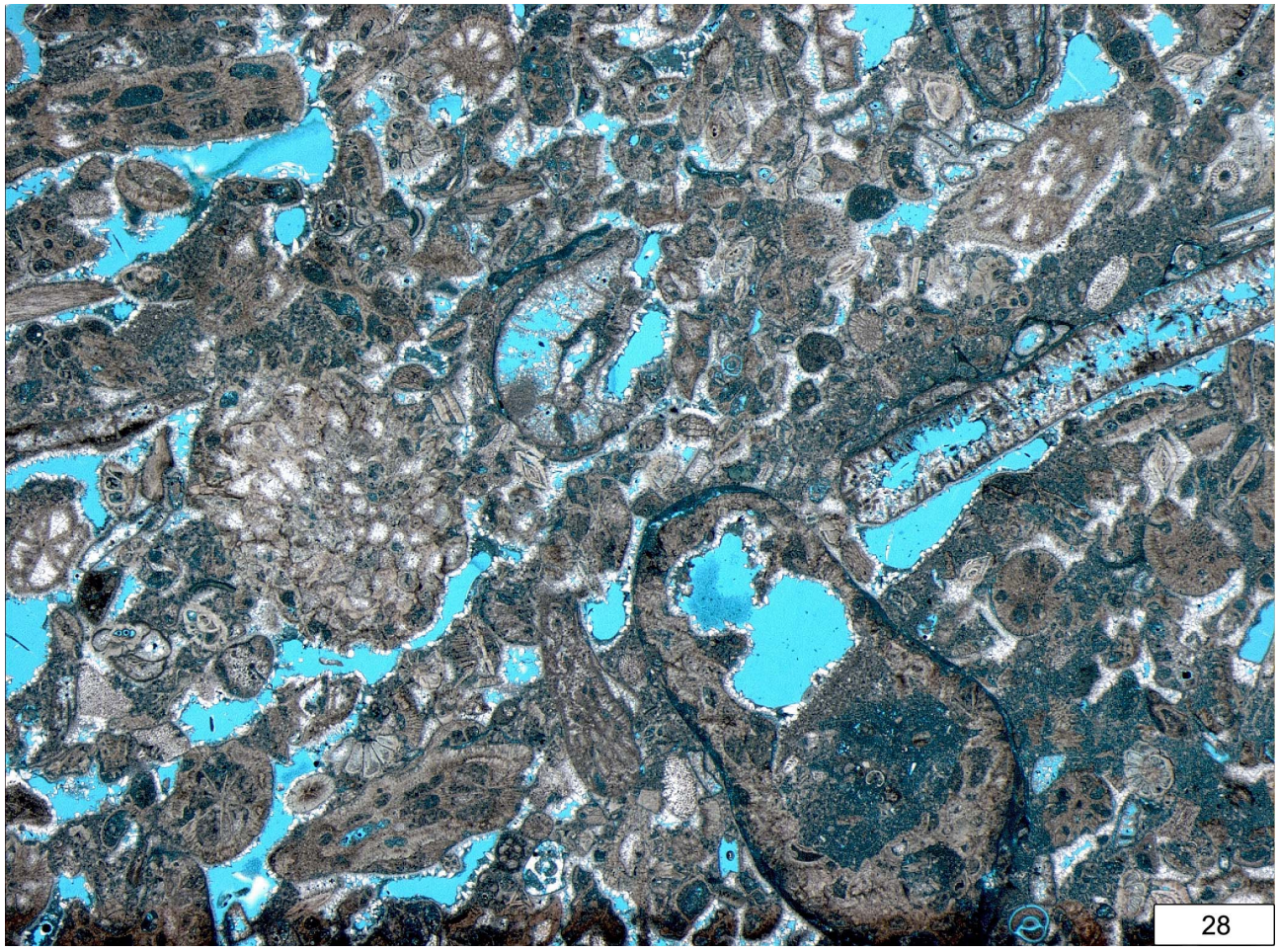

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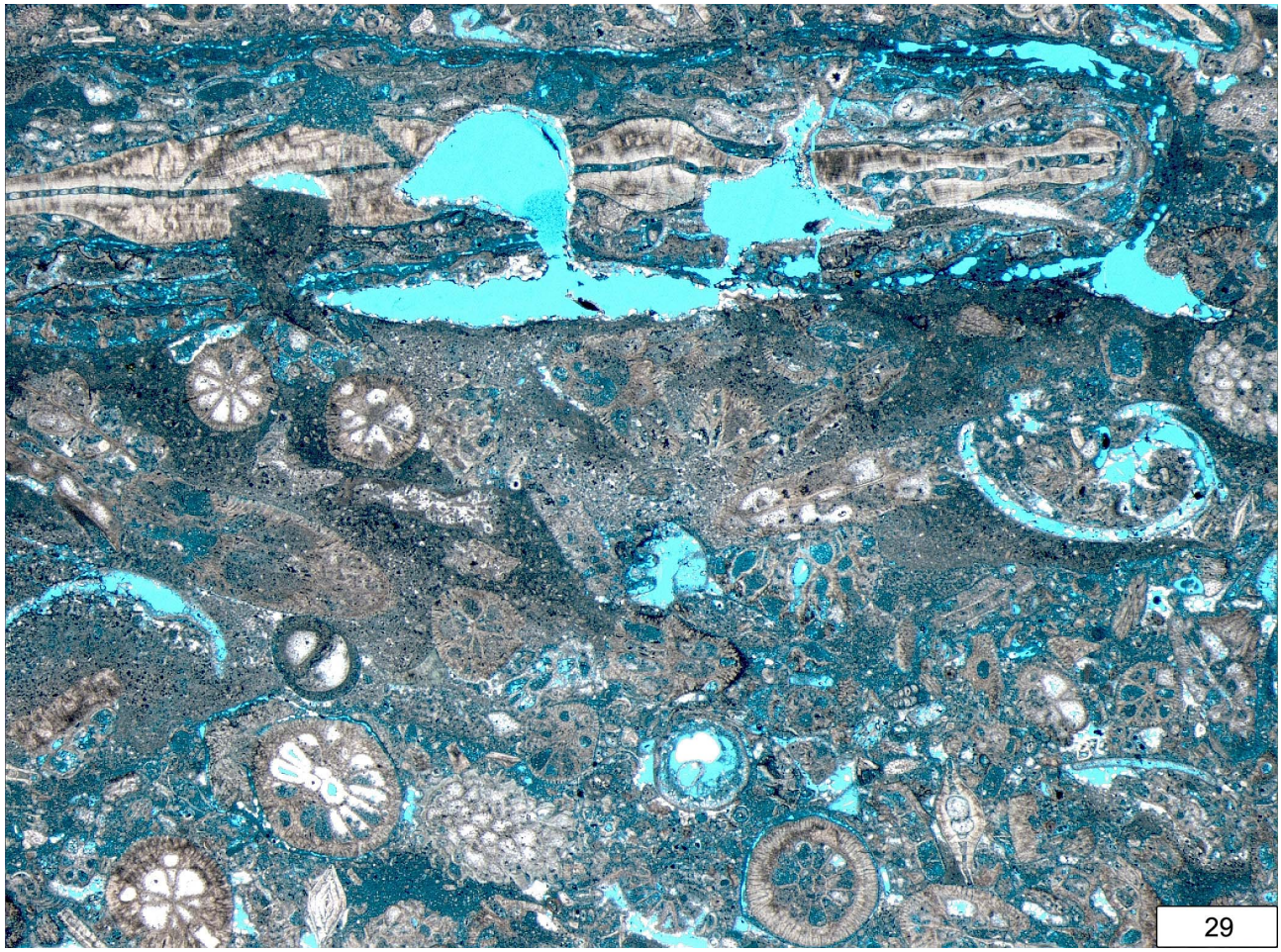

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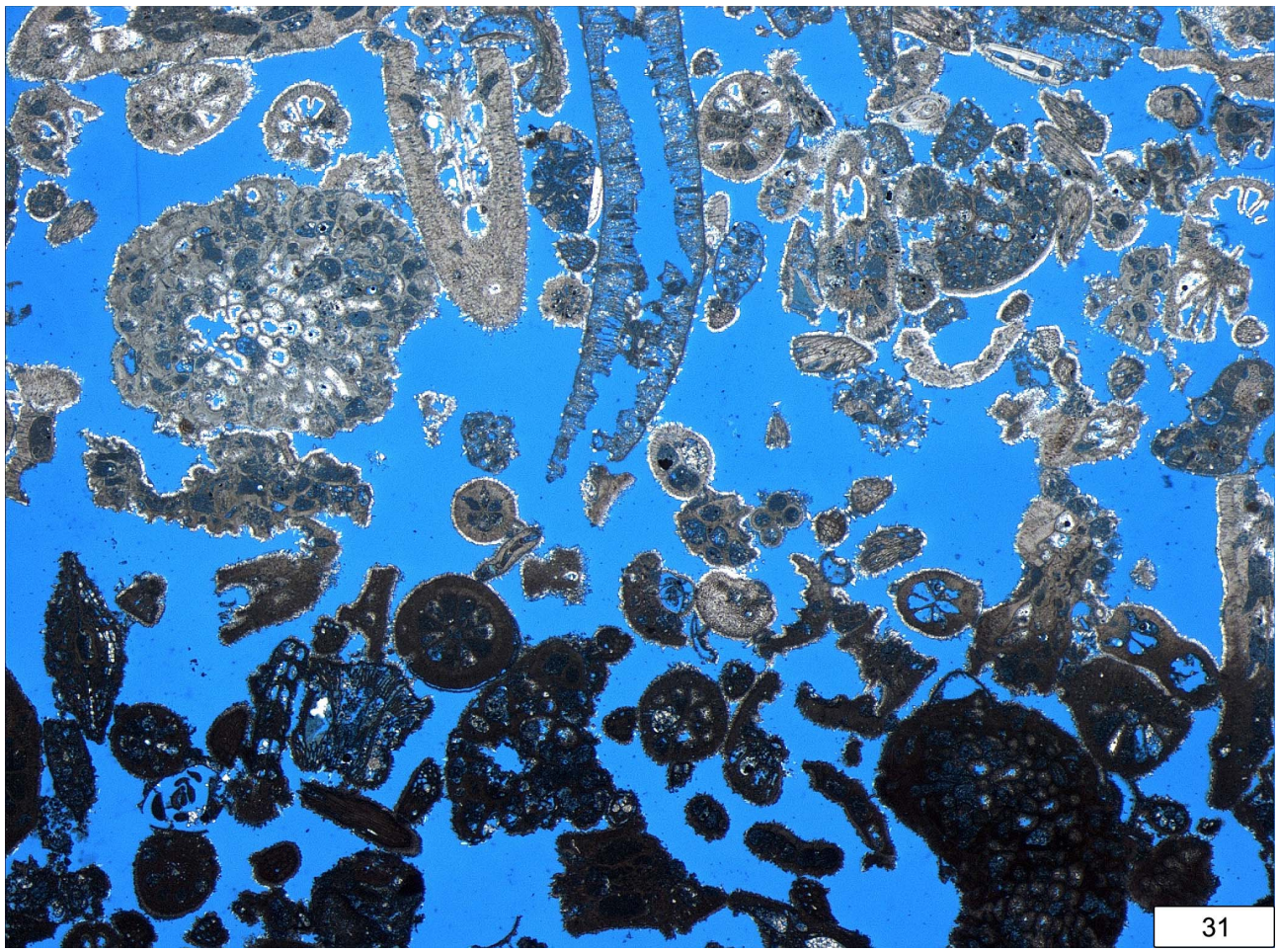

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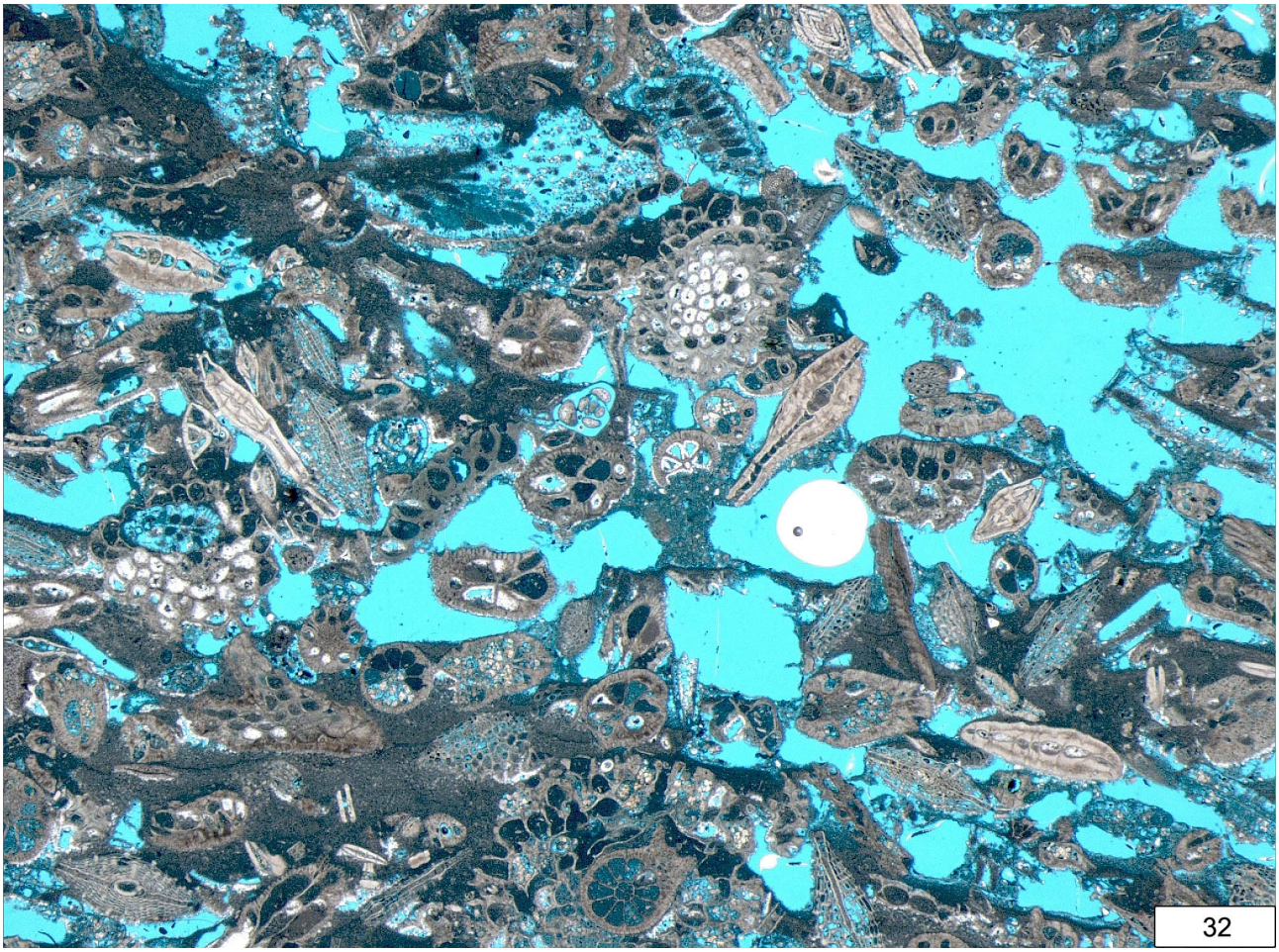

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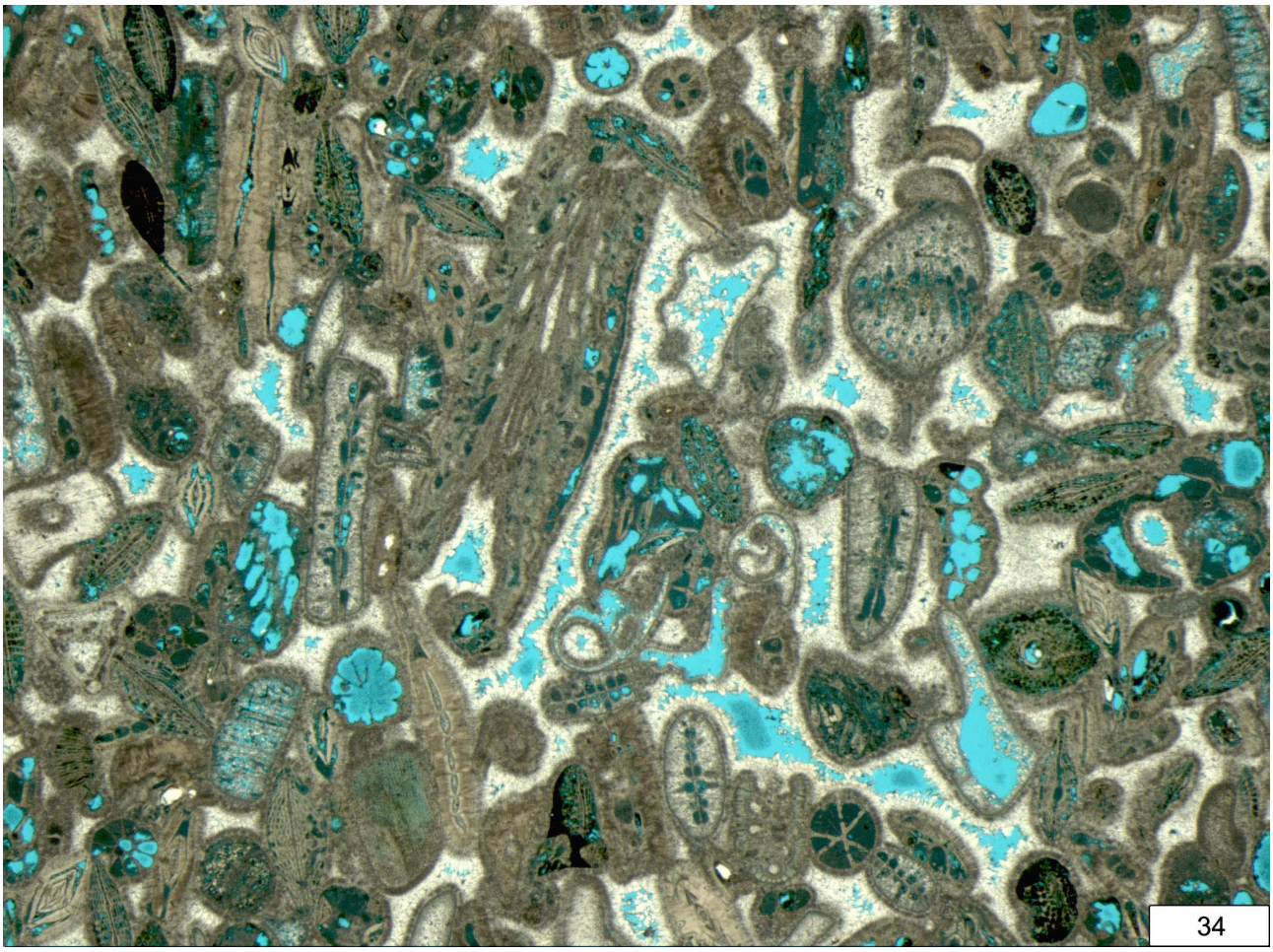

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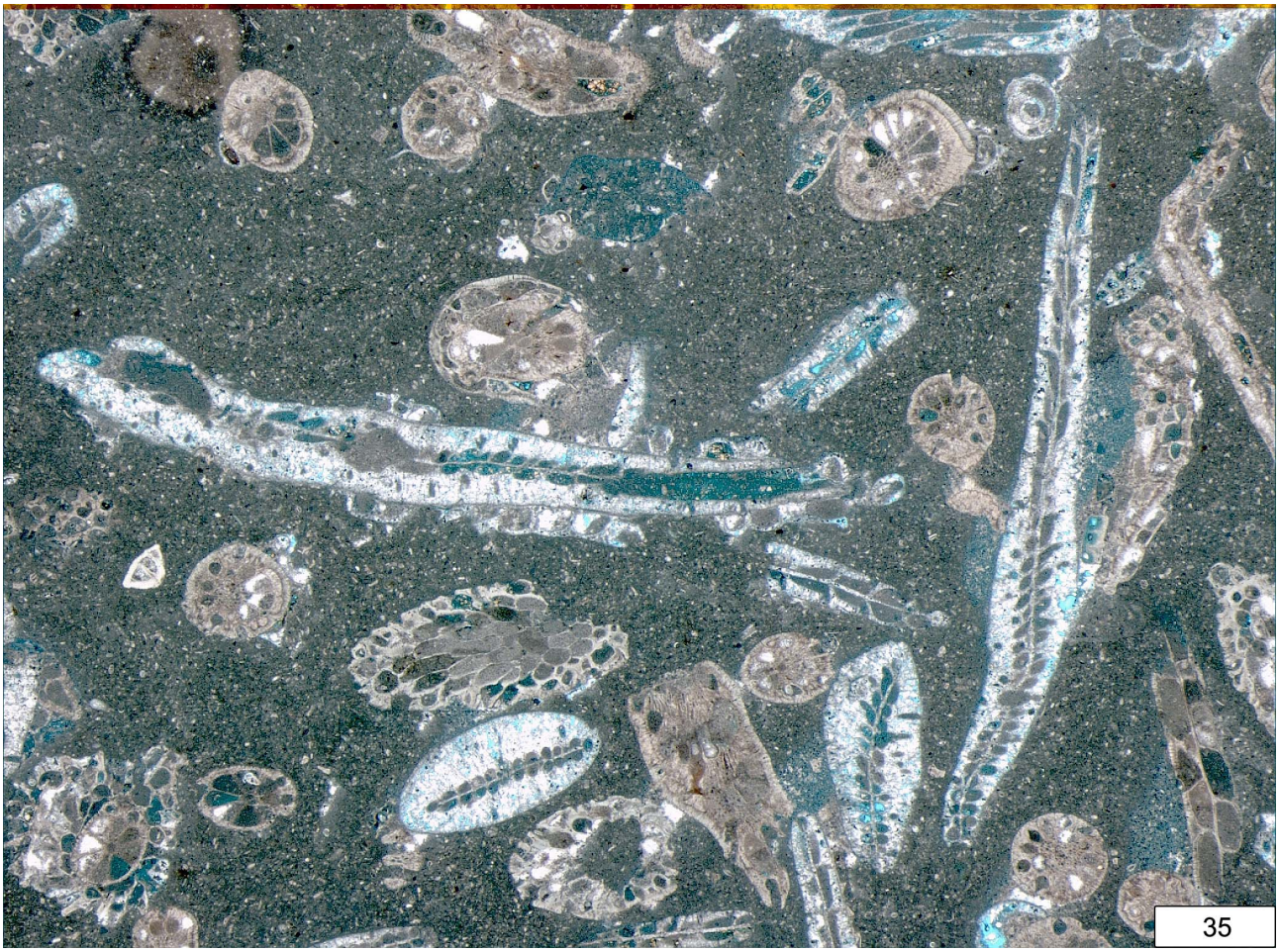

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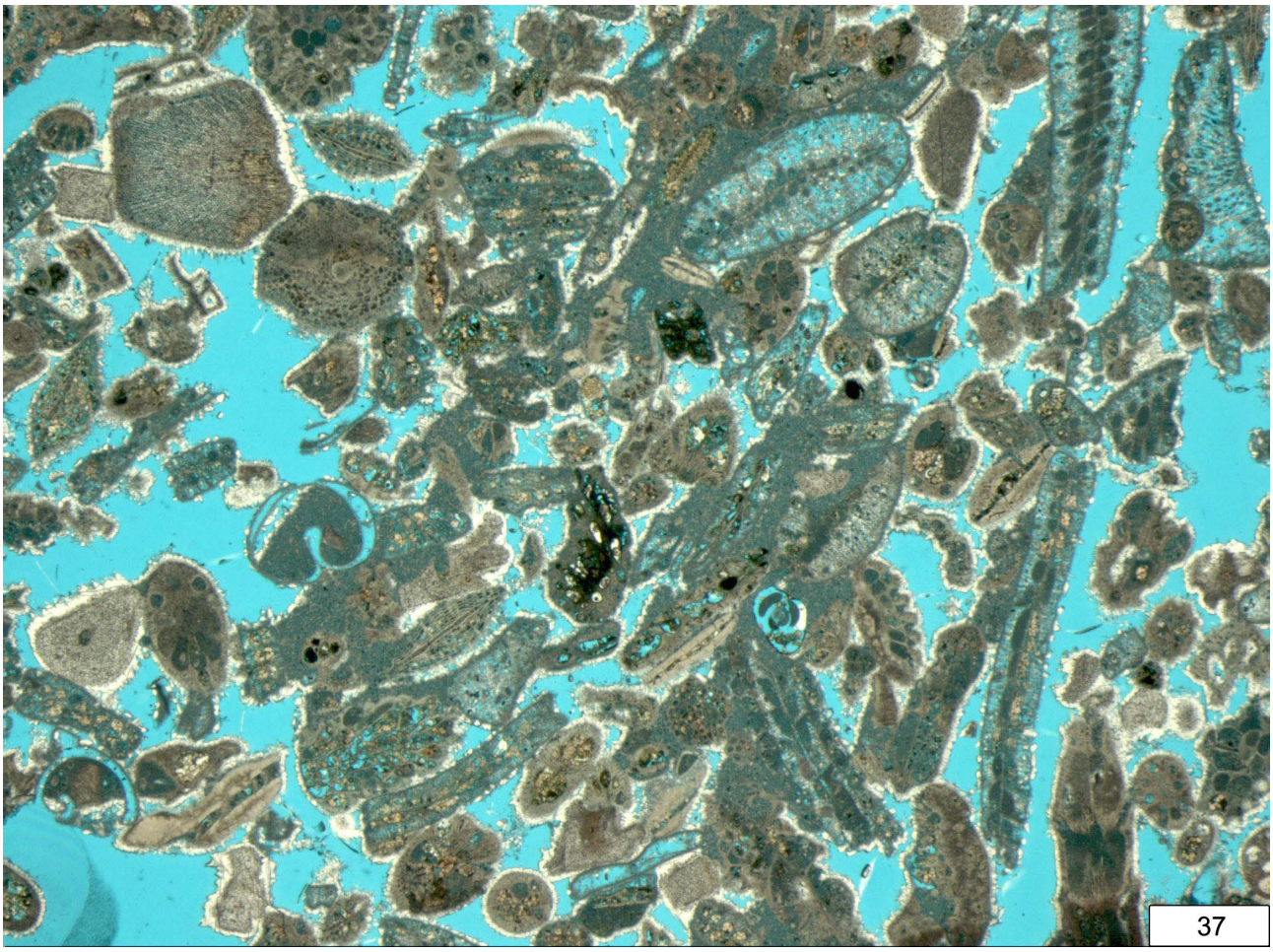

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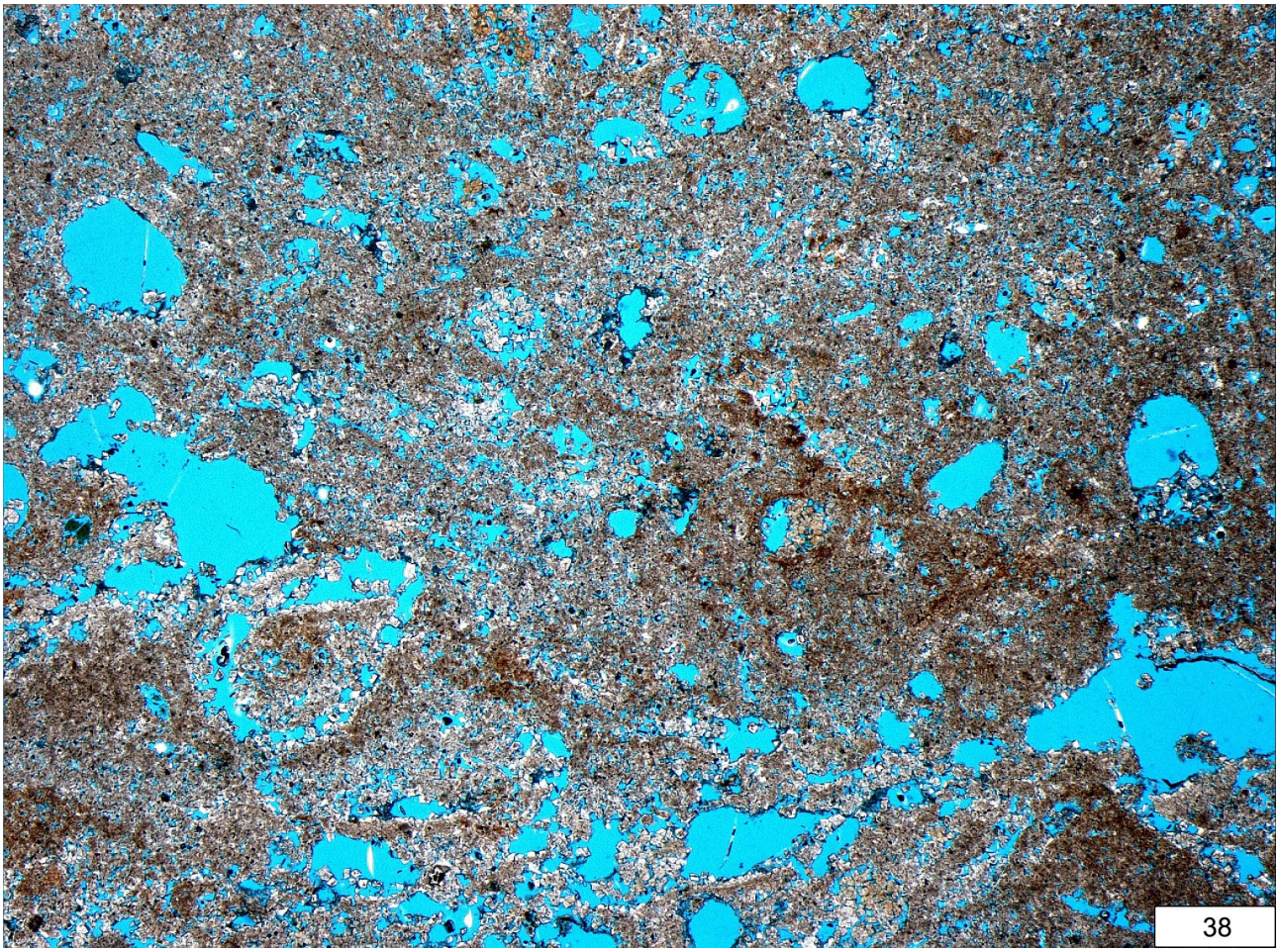

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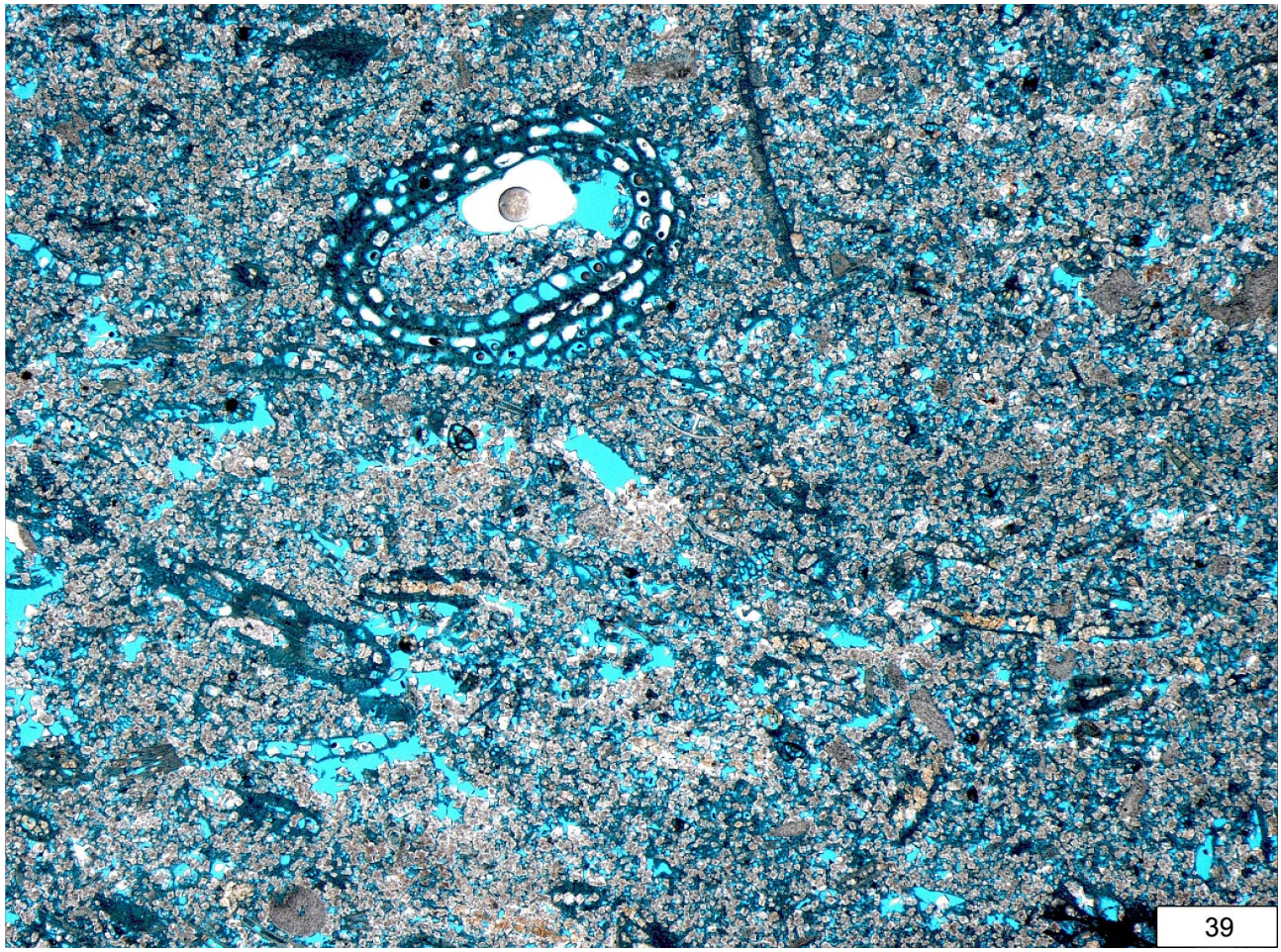

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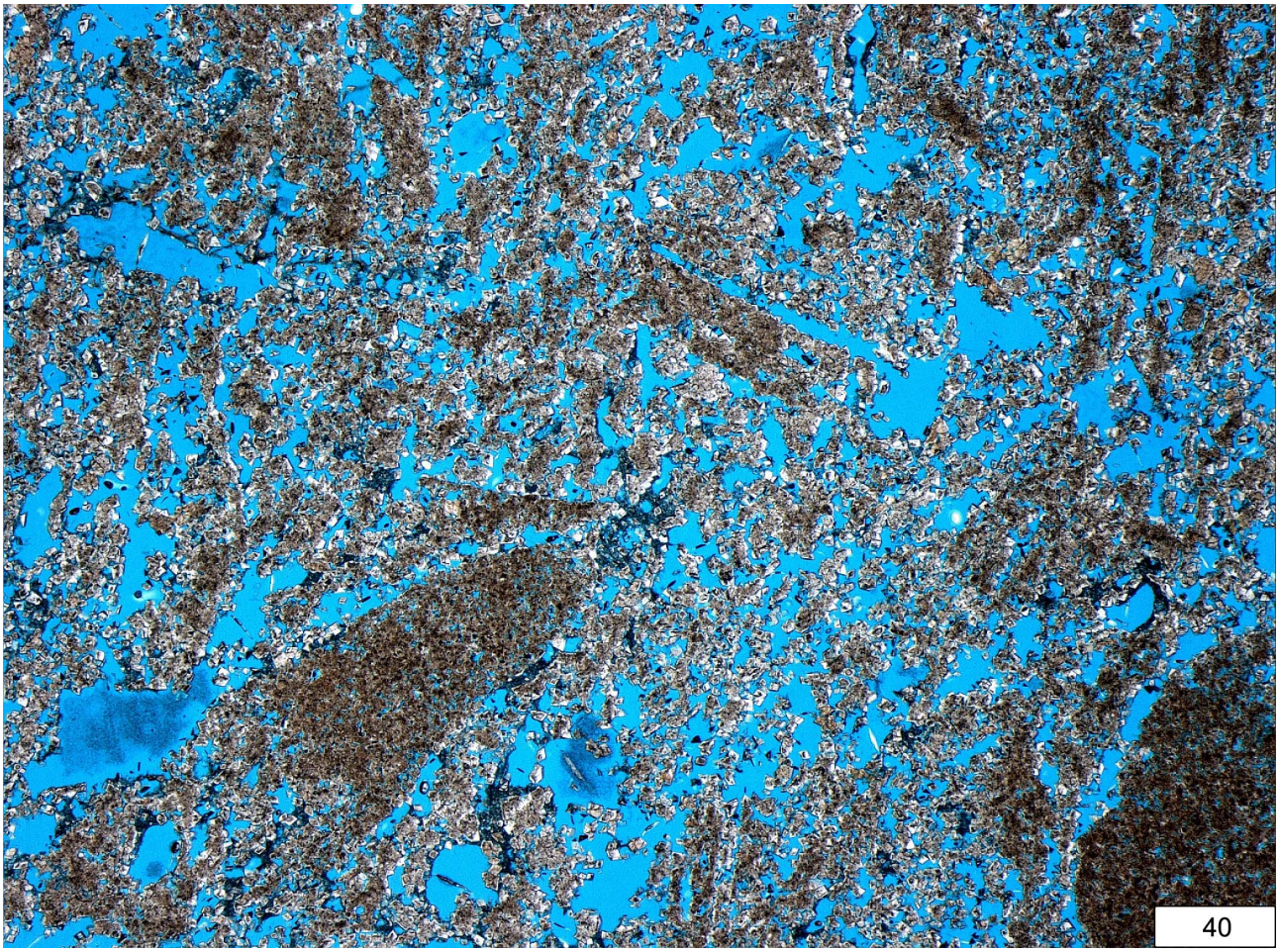


Plate AP1 (continued).

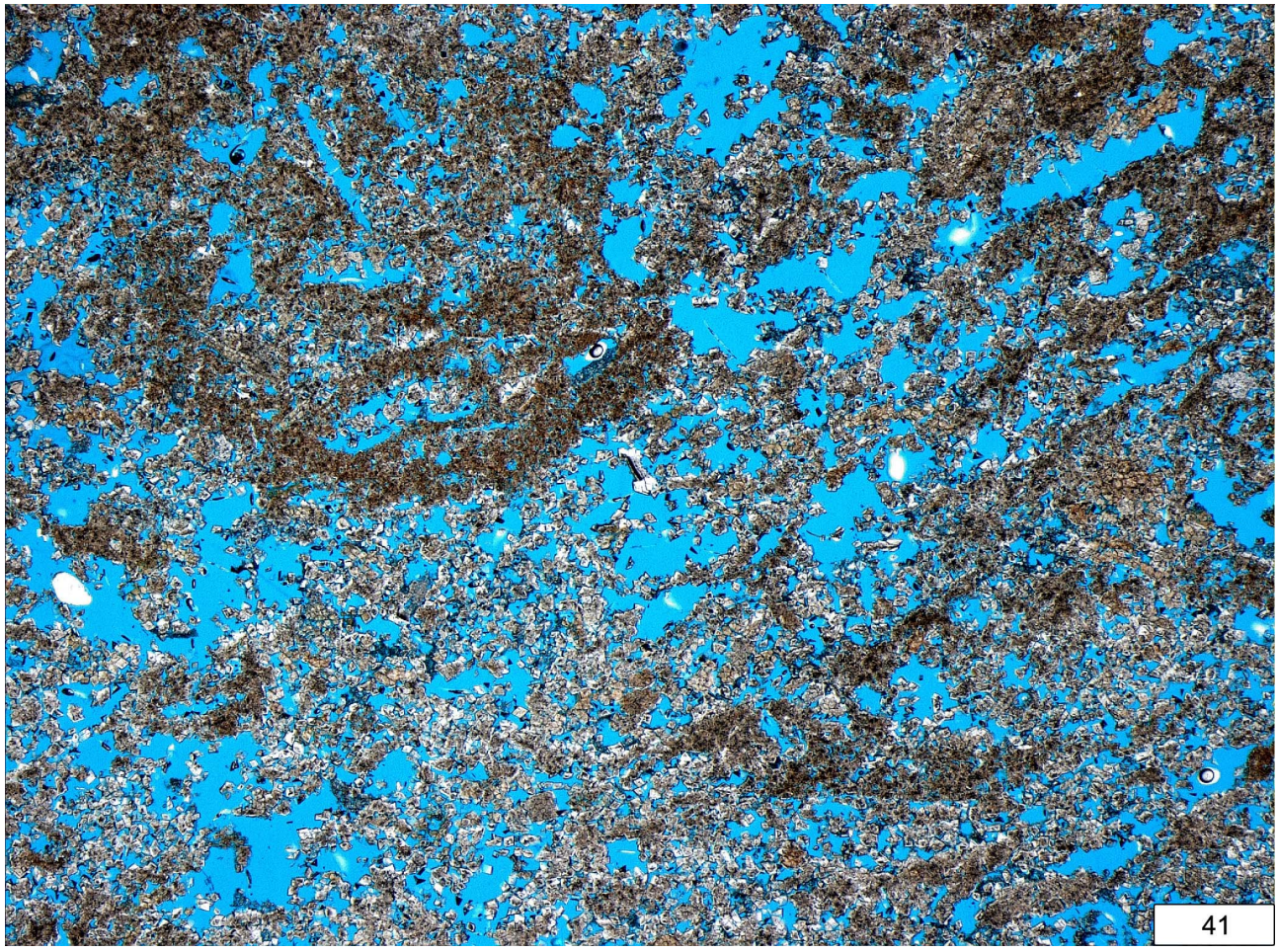


Plate AP1 (continued).

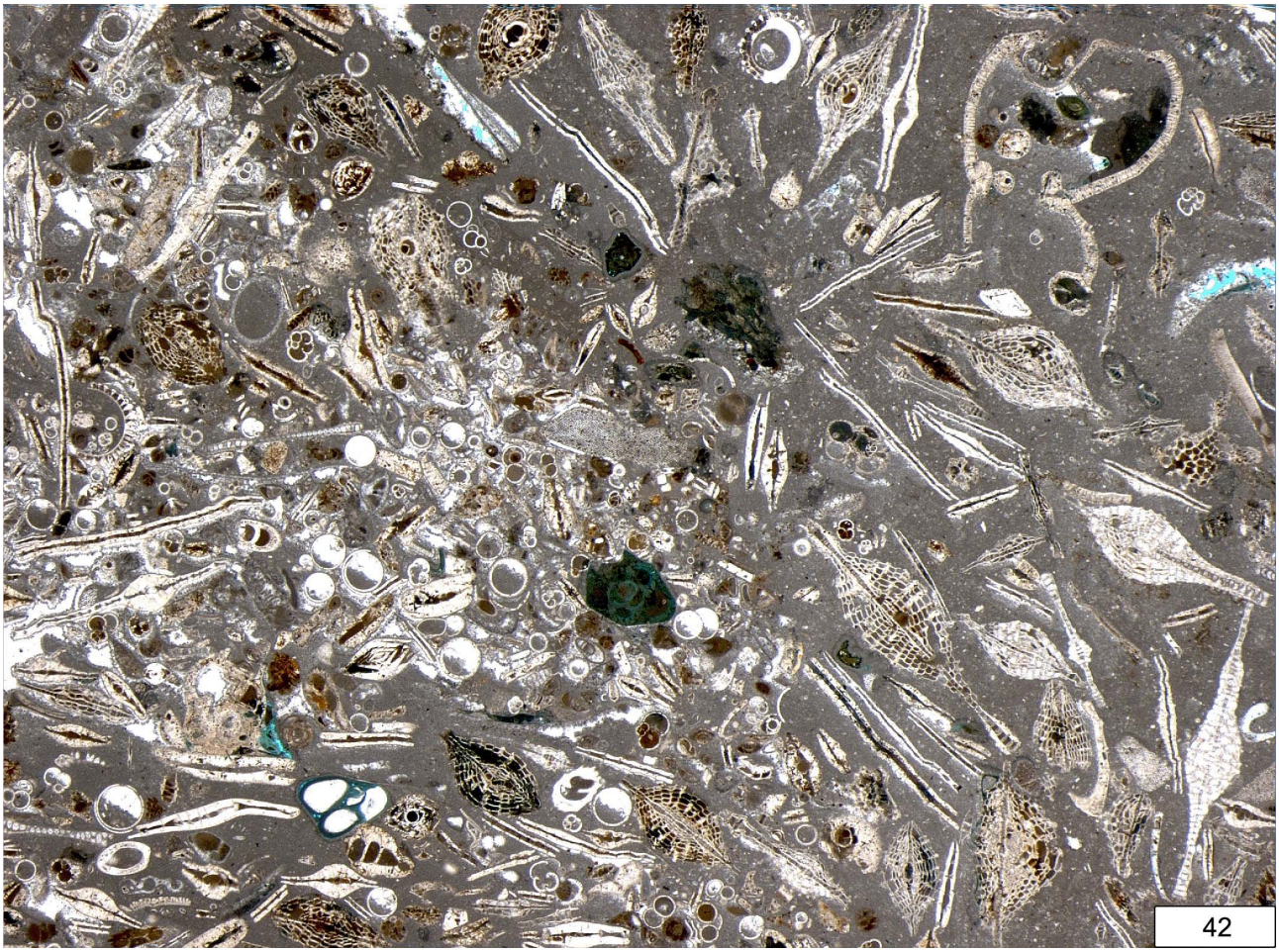


Plate AP1 (continued).

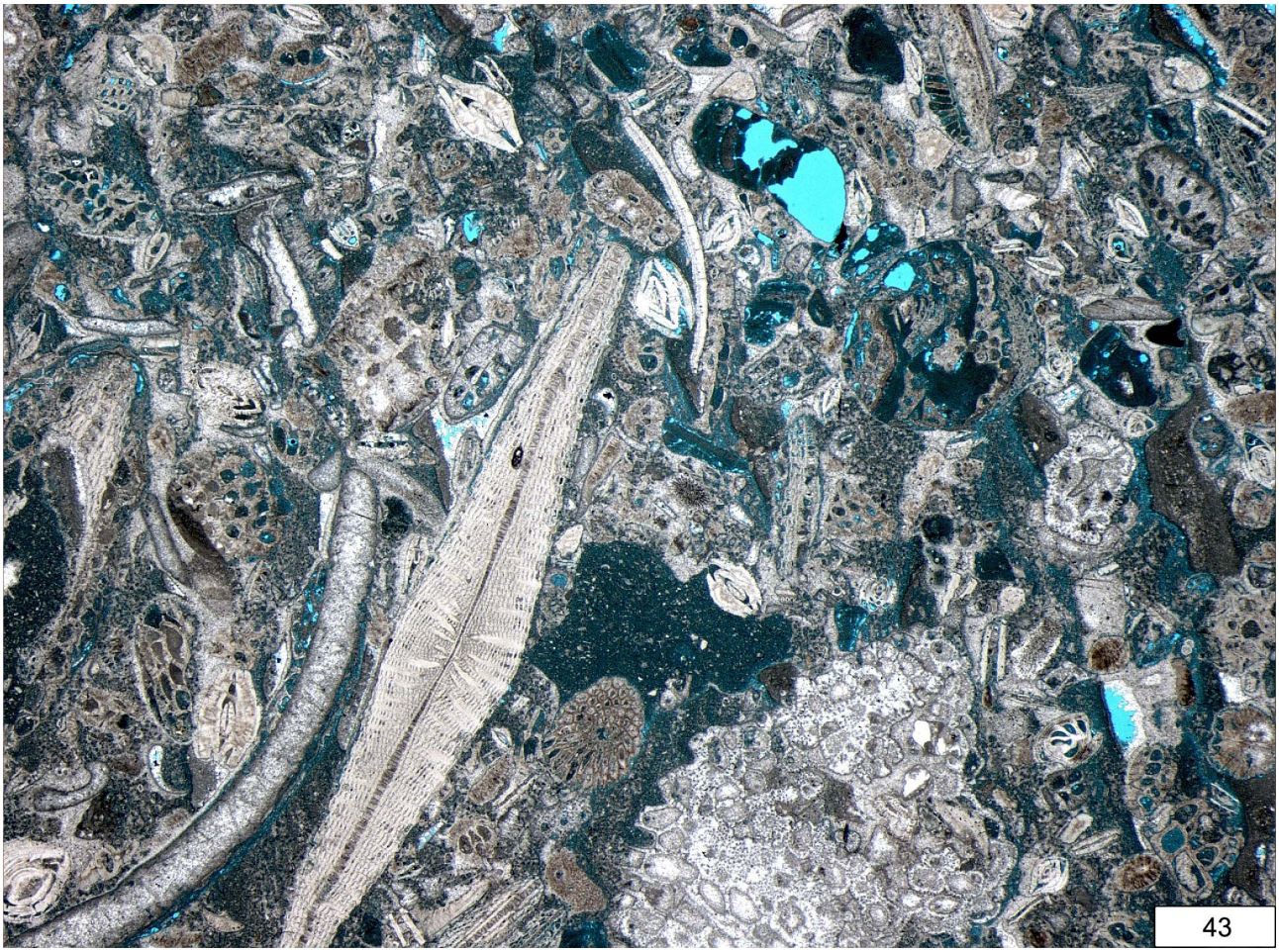
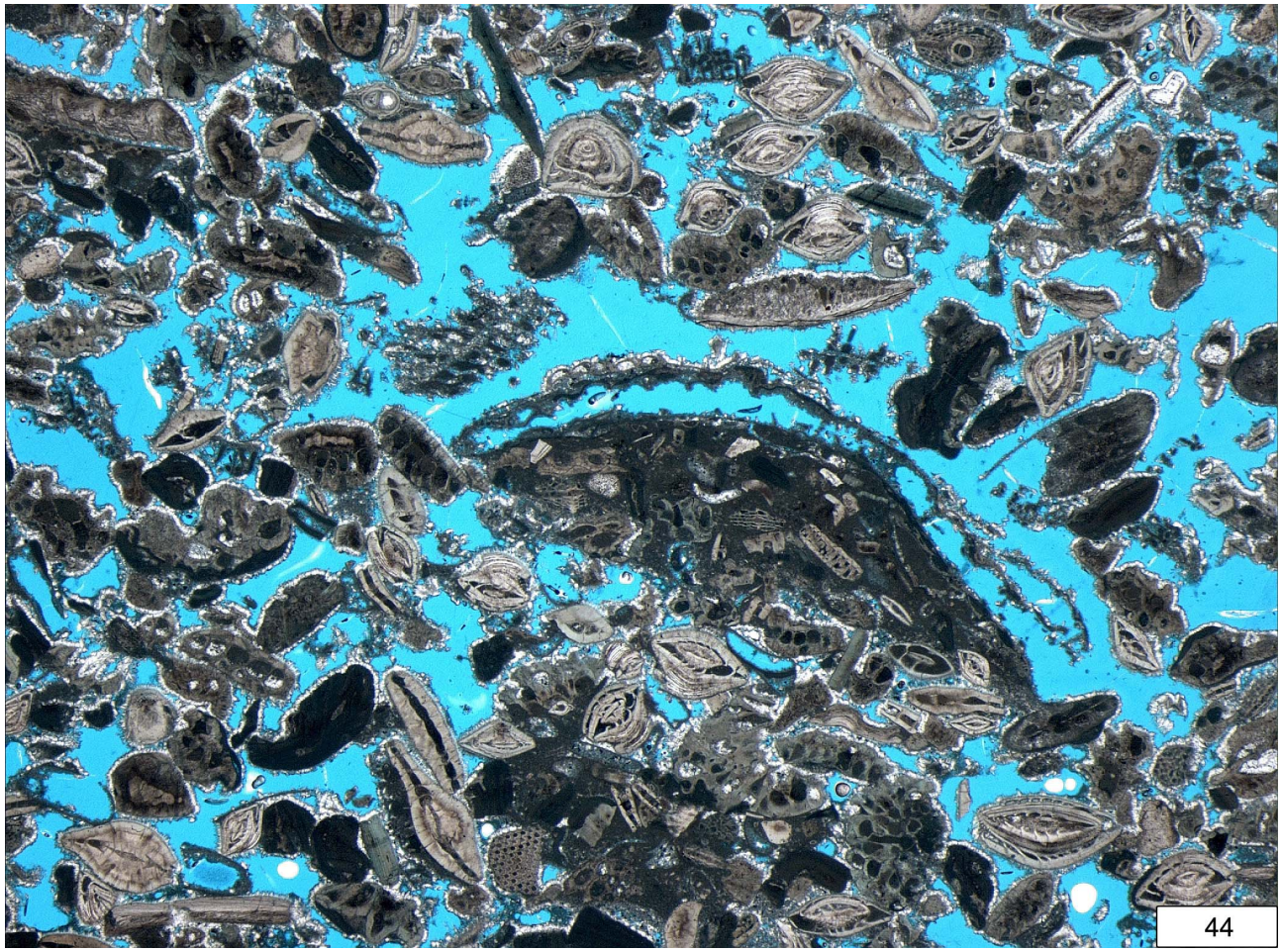


Plate AP1 (continued).



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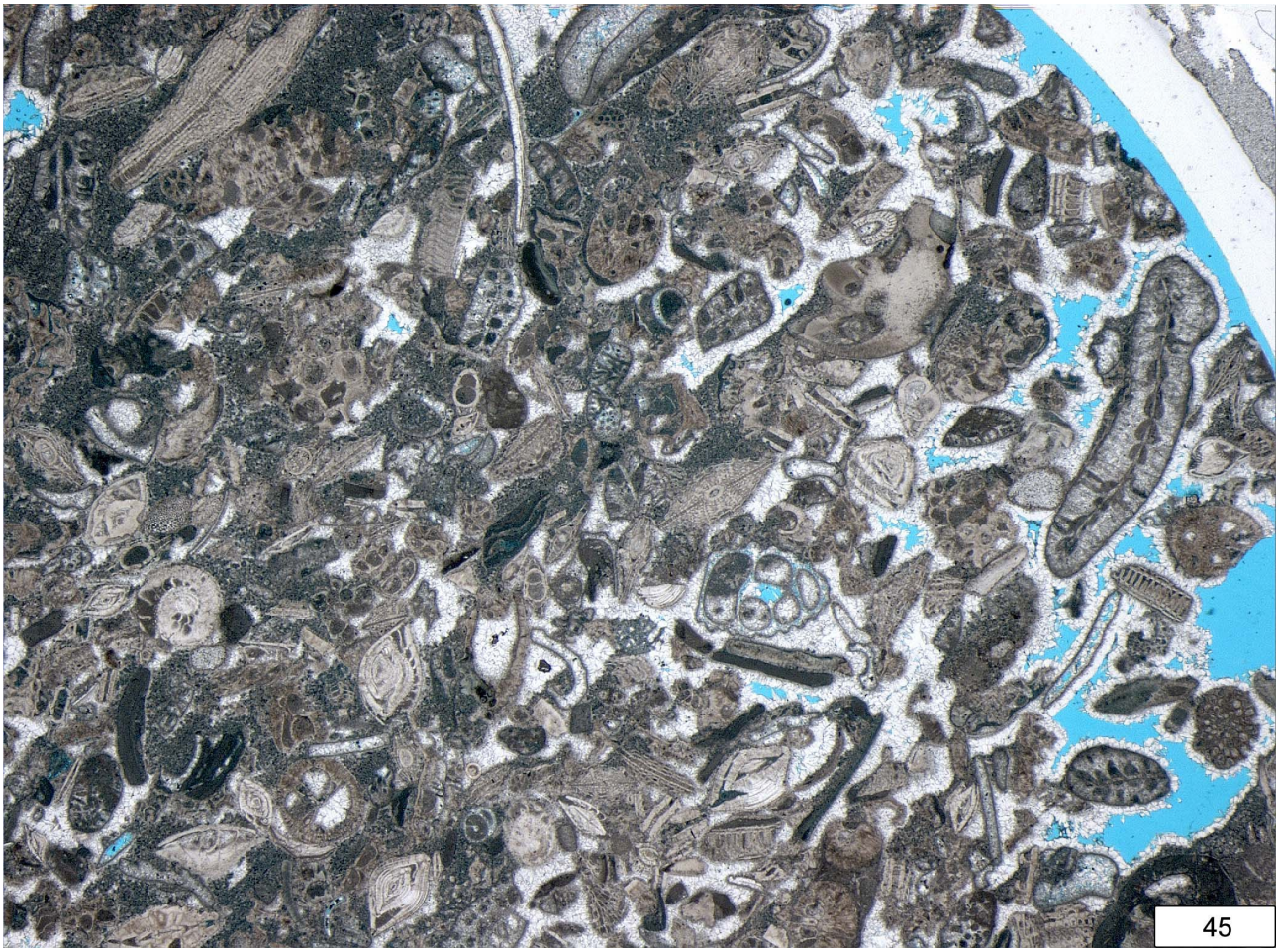

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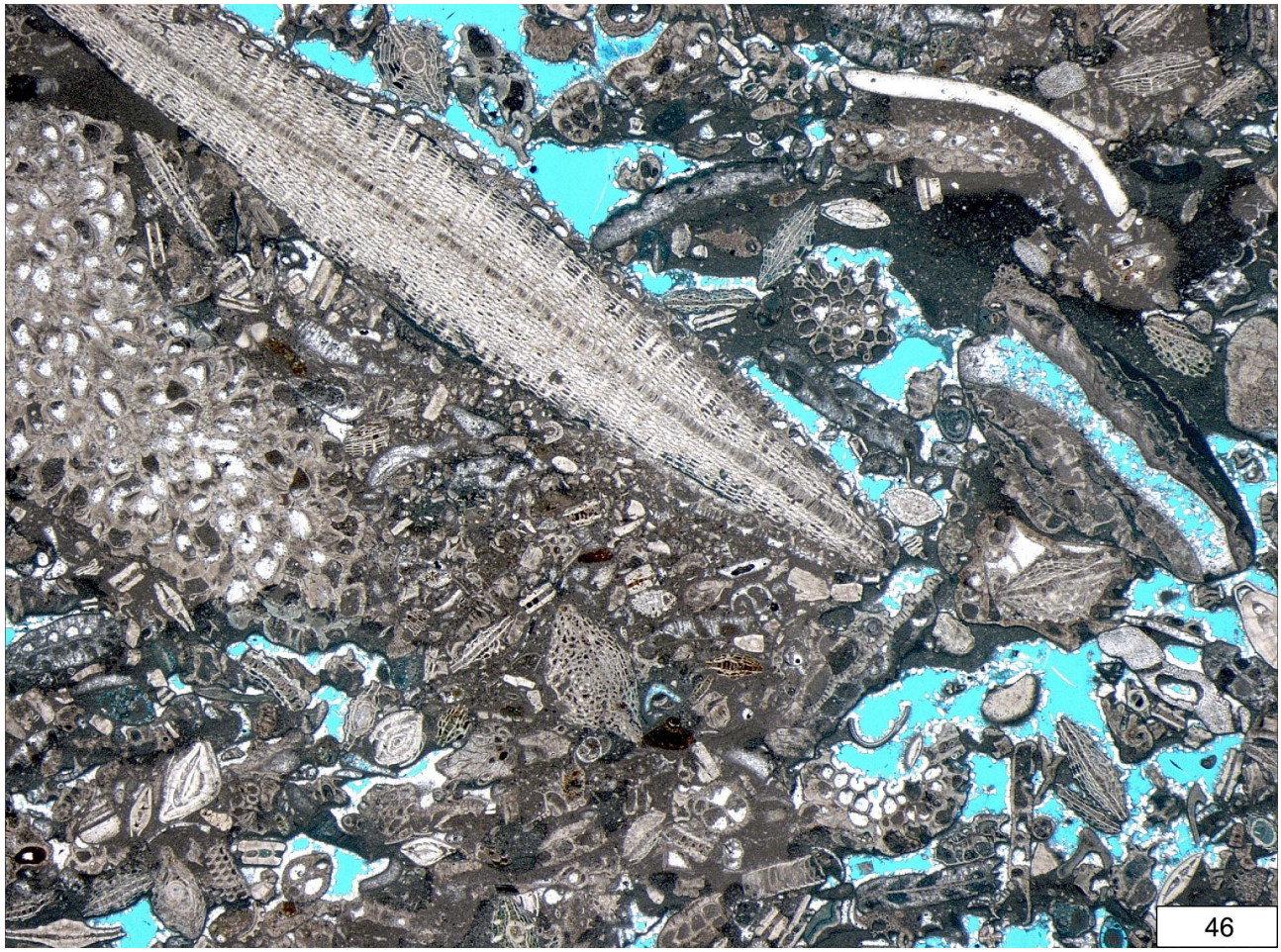

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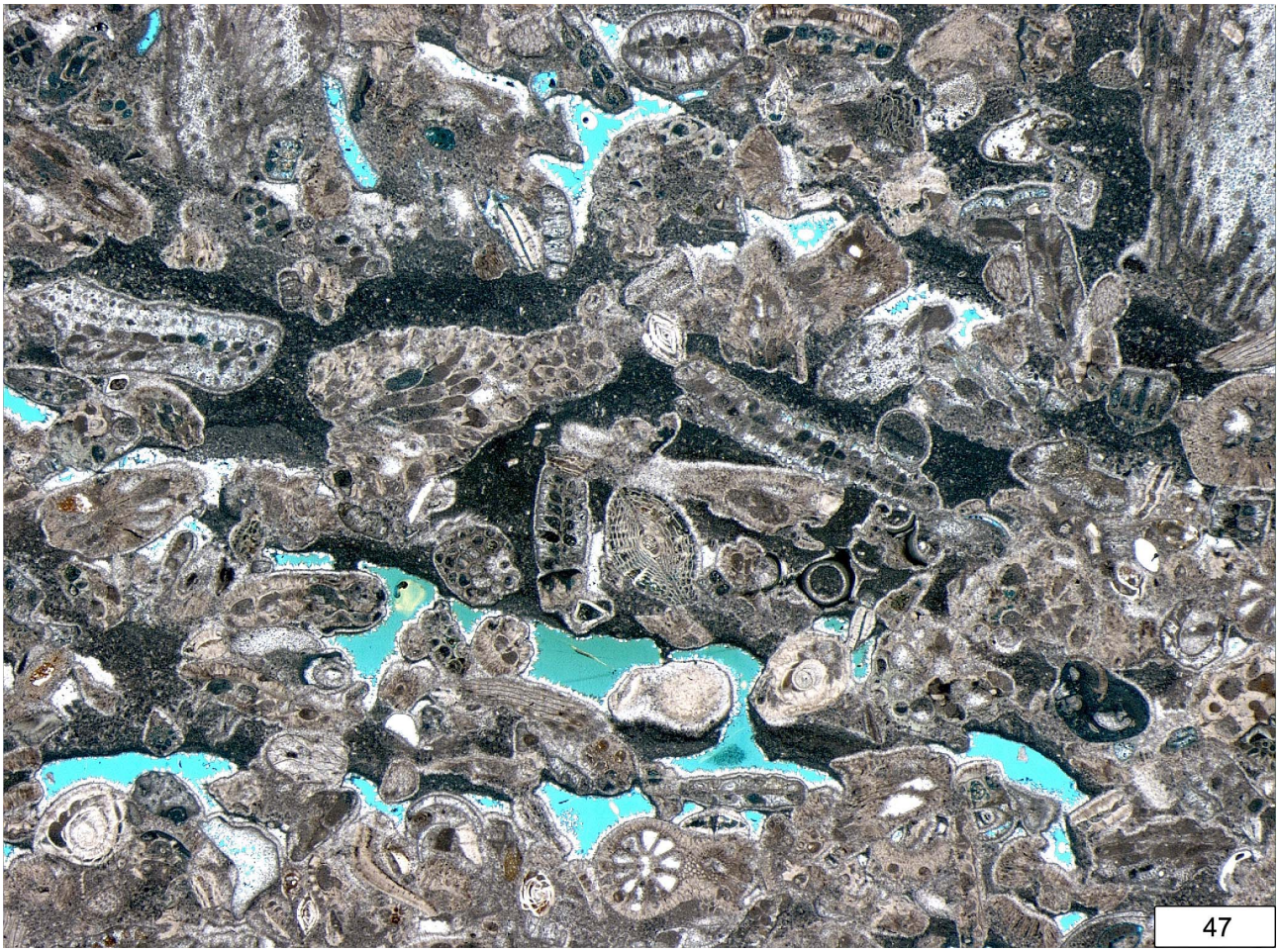

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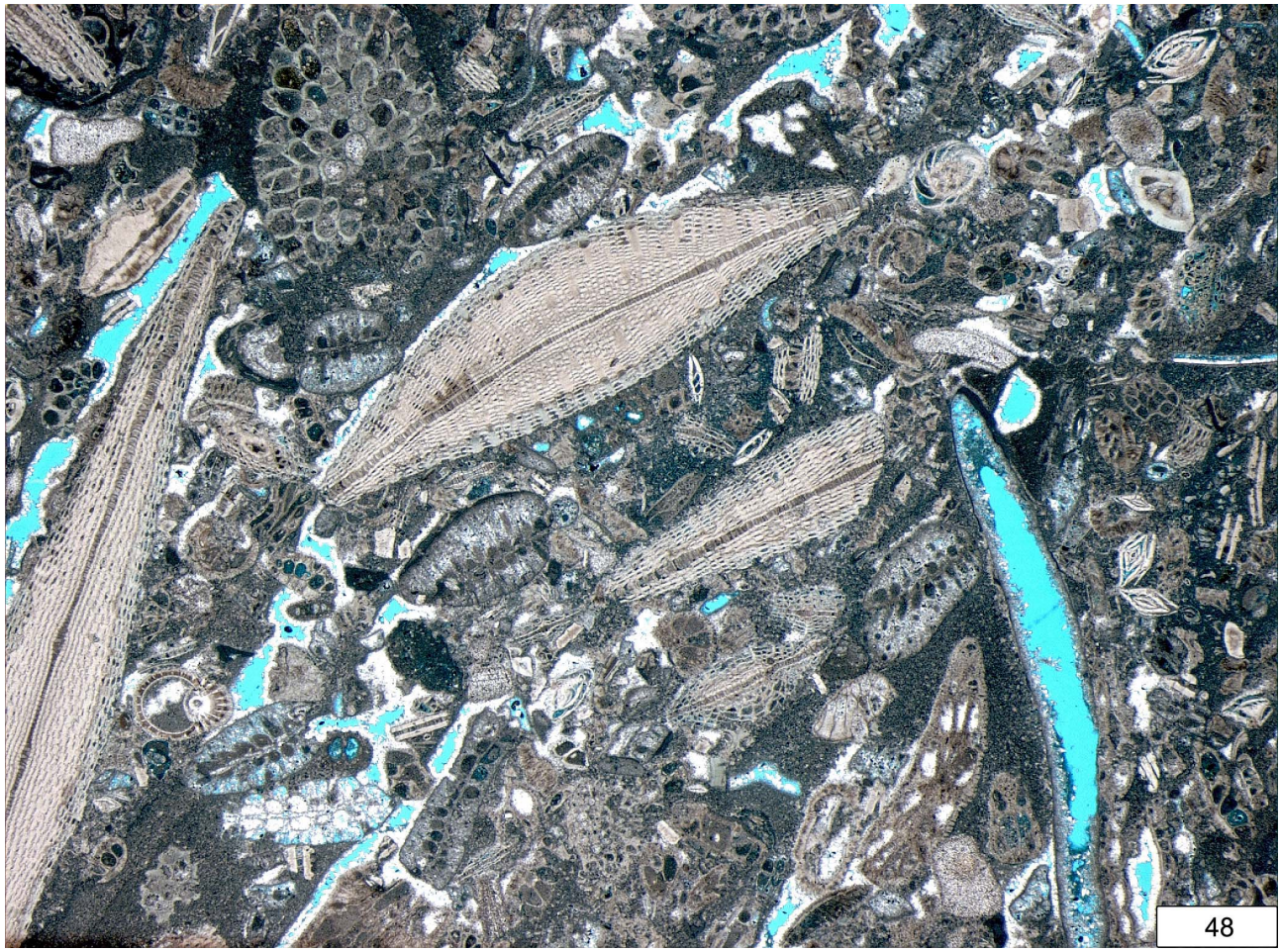

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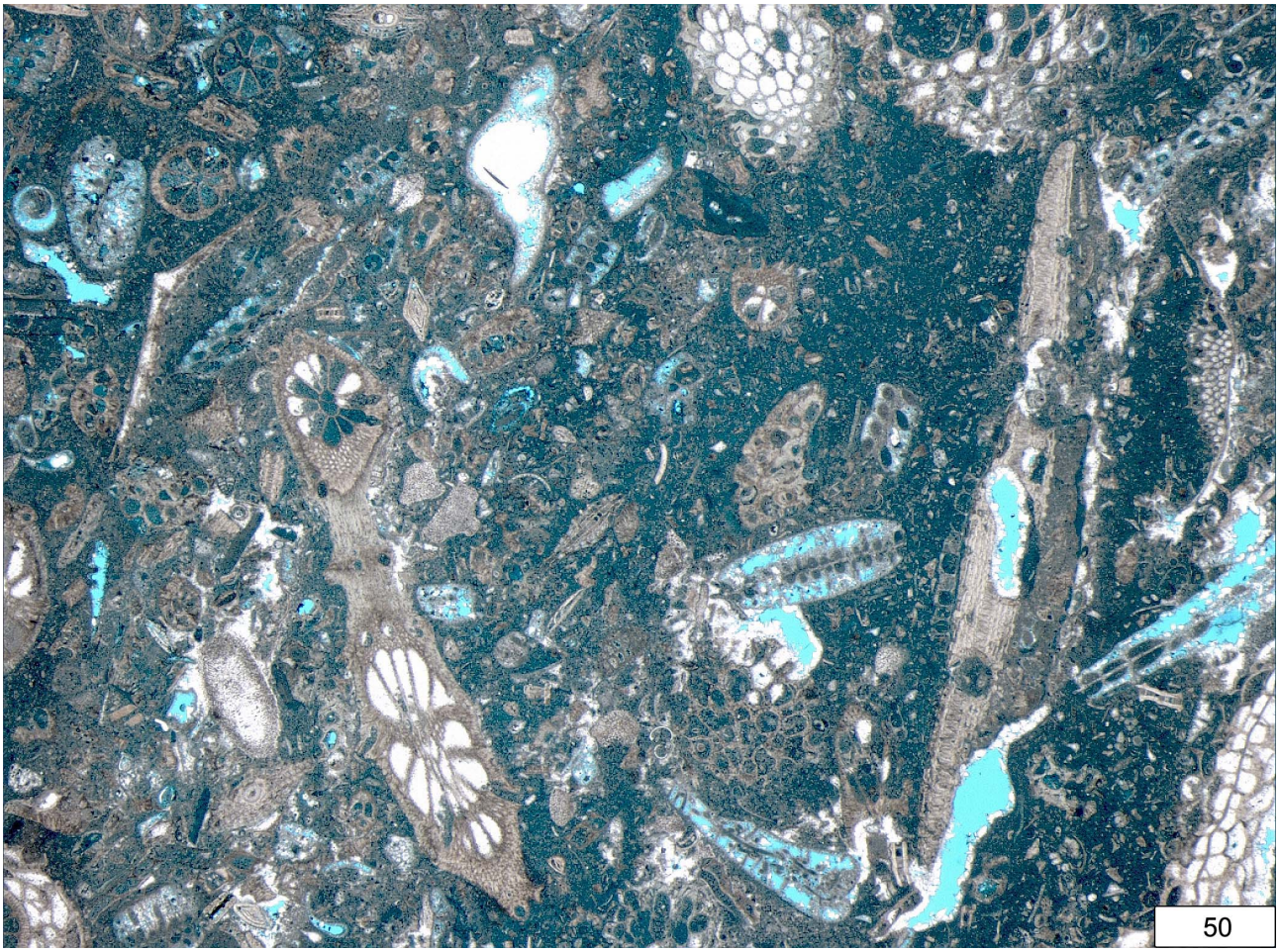

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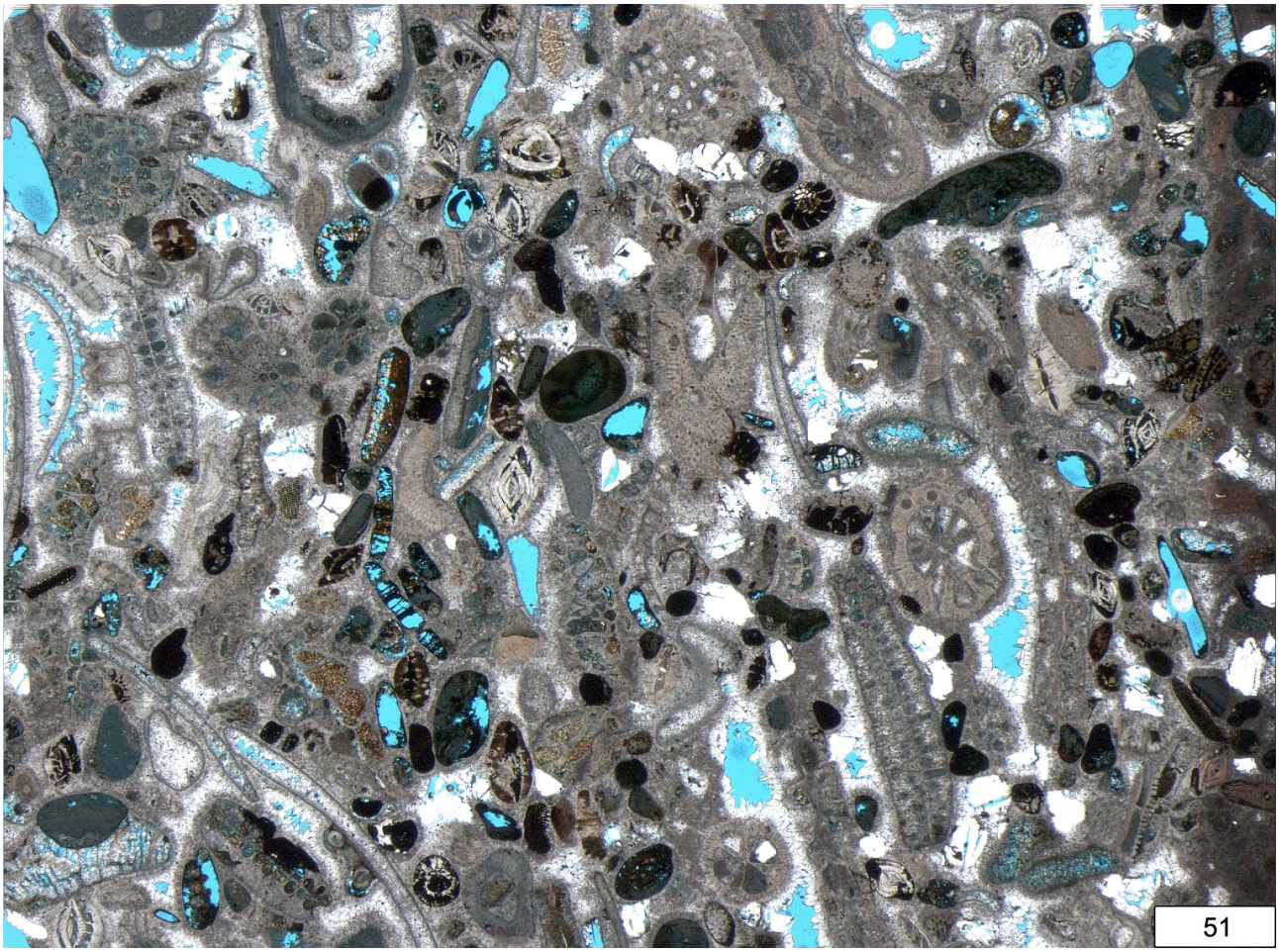

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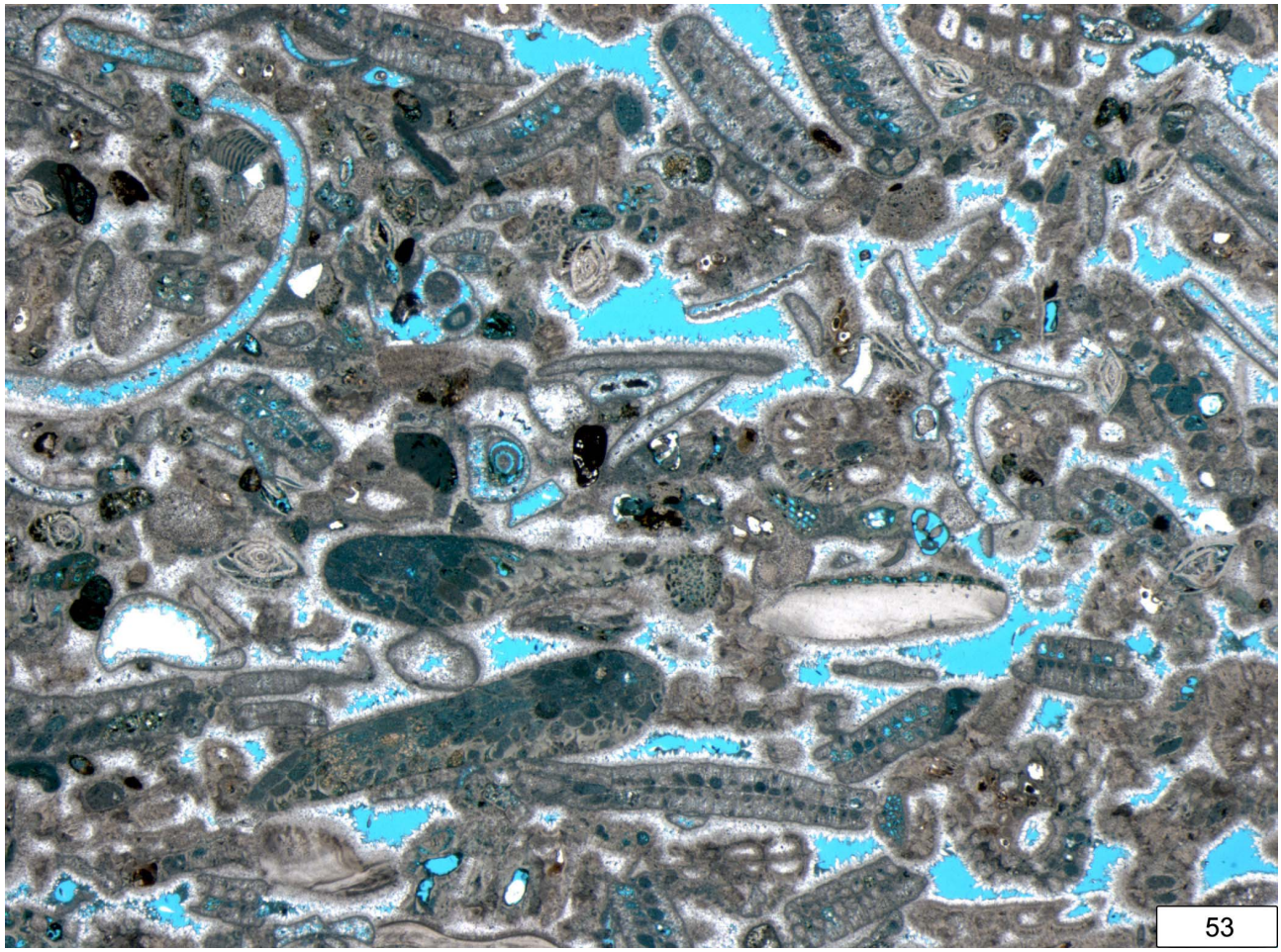
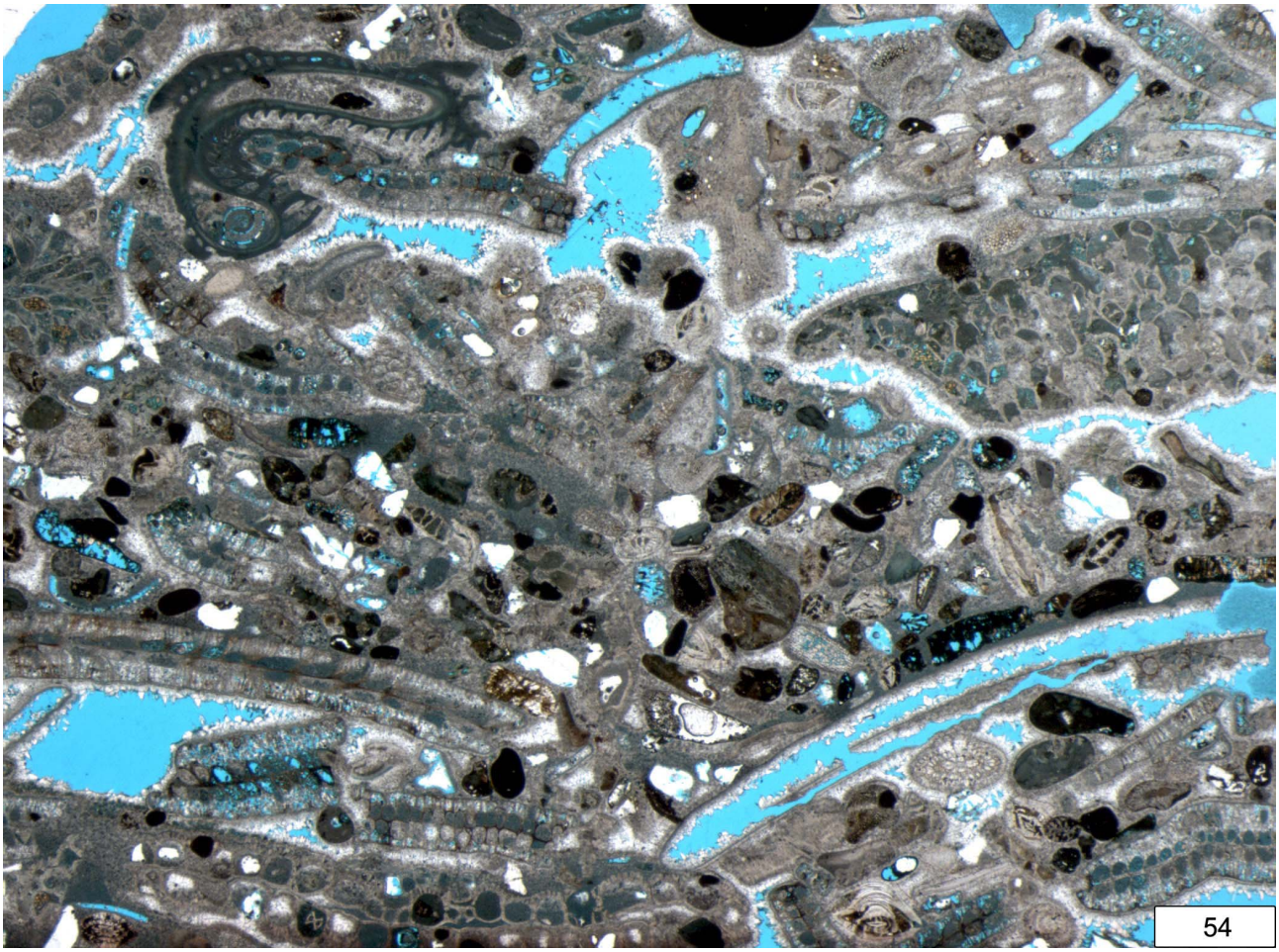


Plate AP1 (continued).



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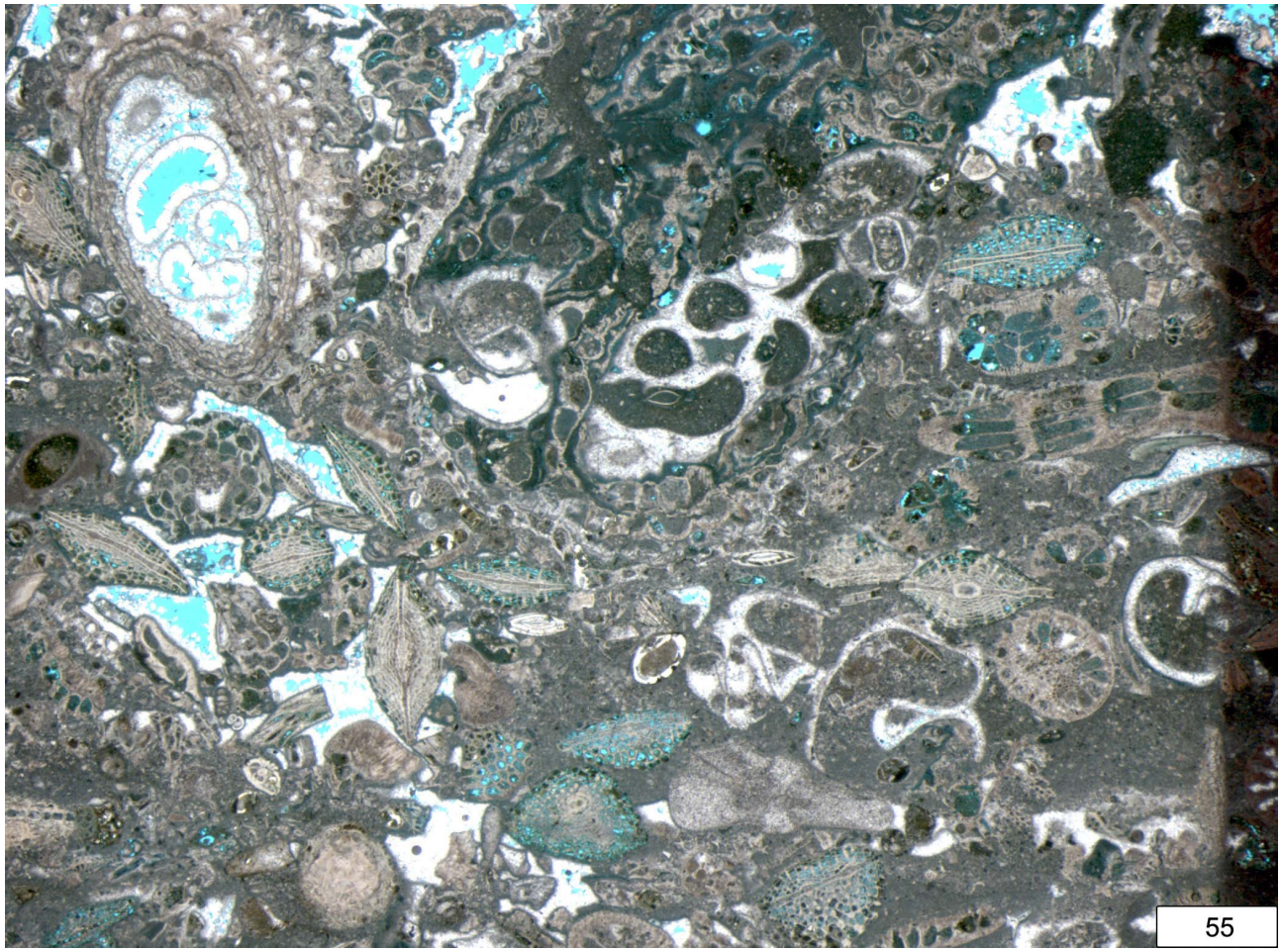

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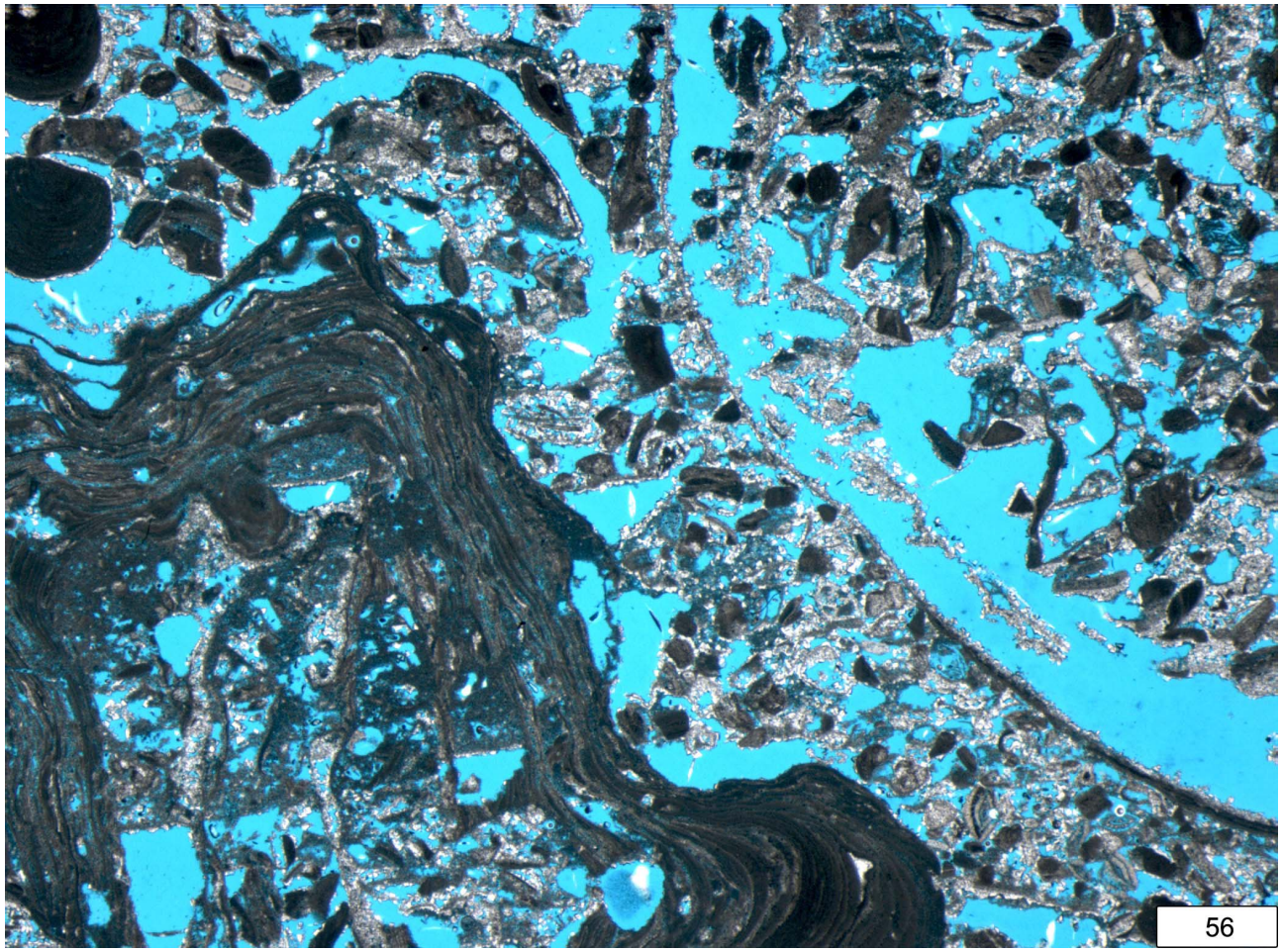


Plate AP1 (continued).

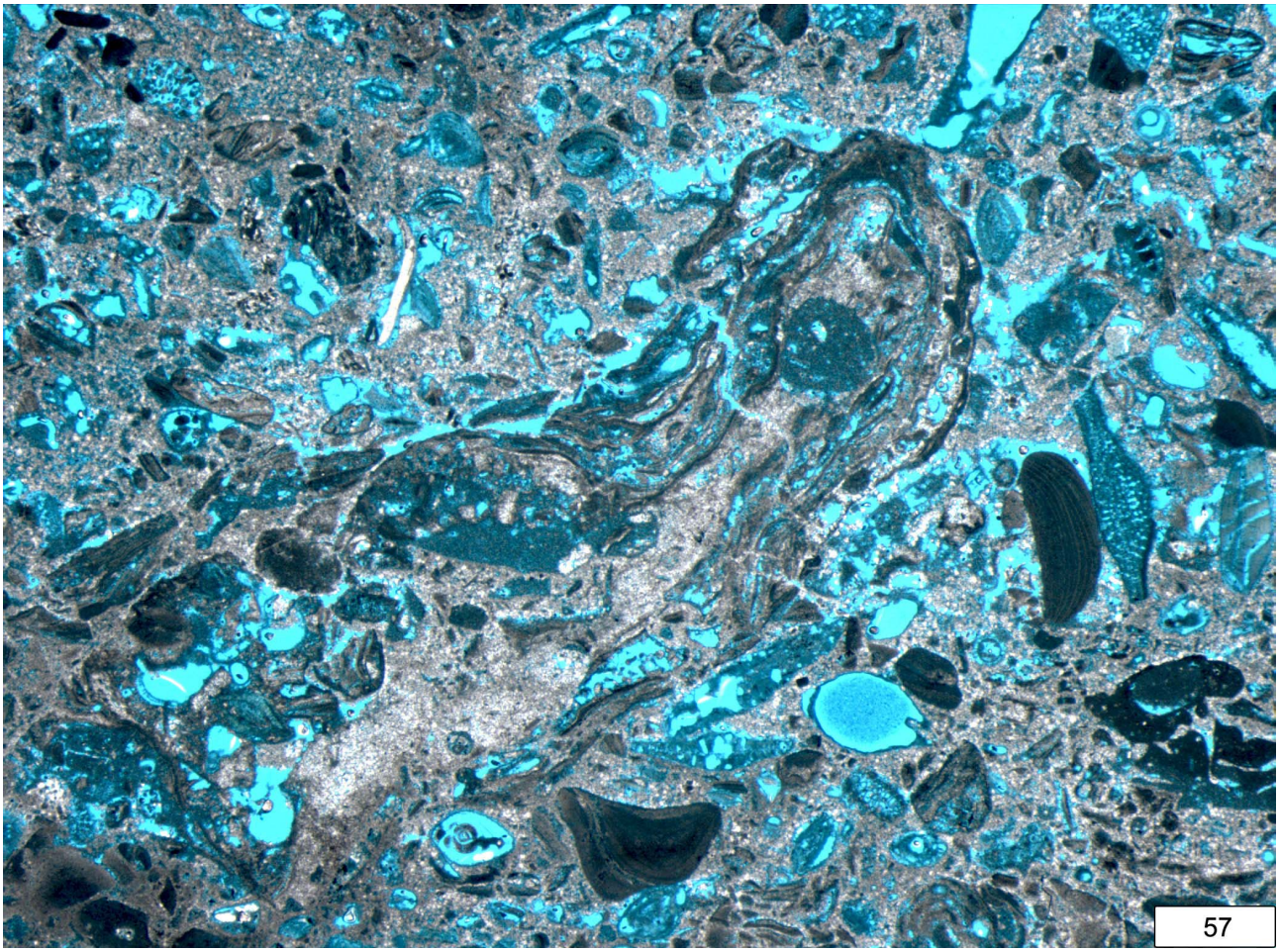


Plate AP1 (continued).

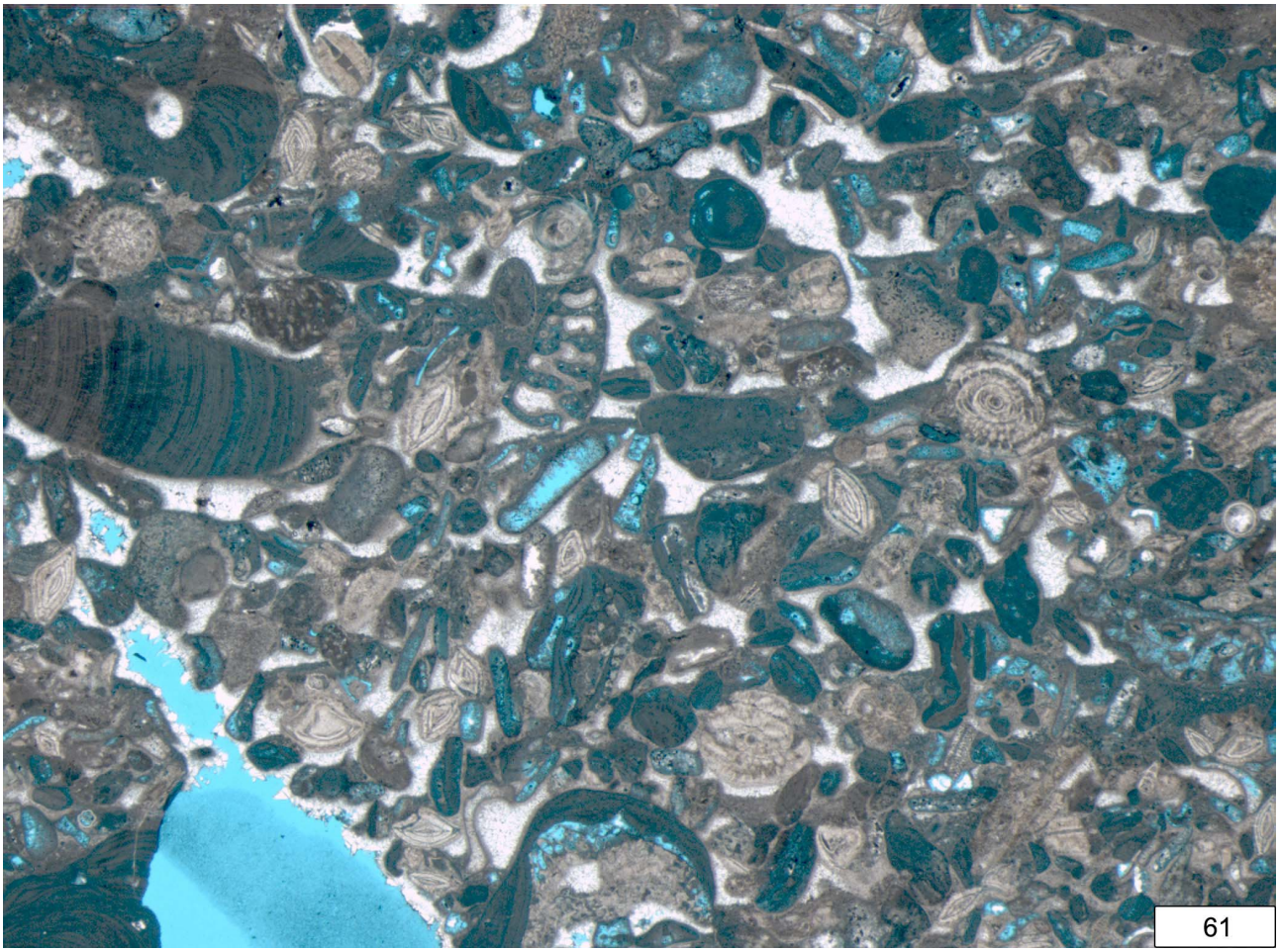
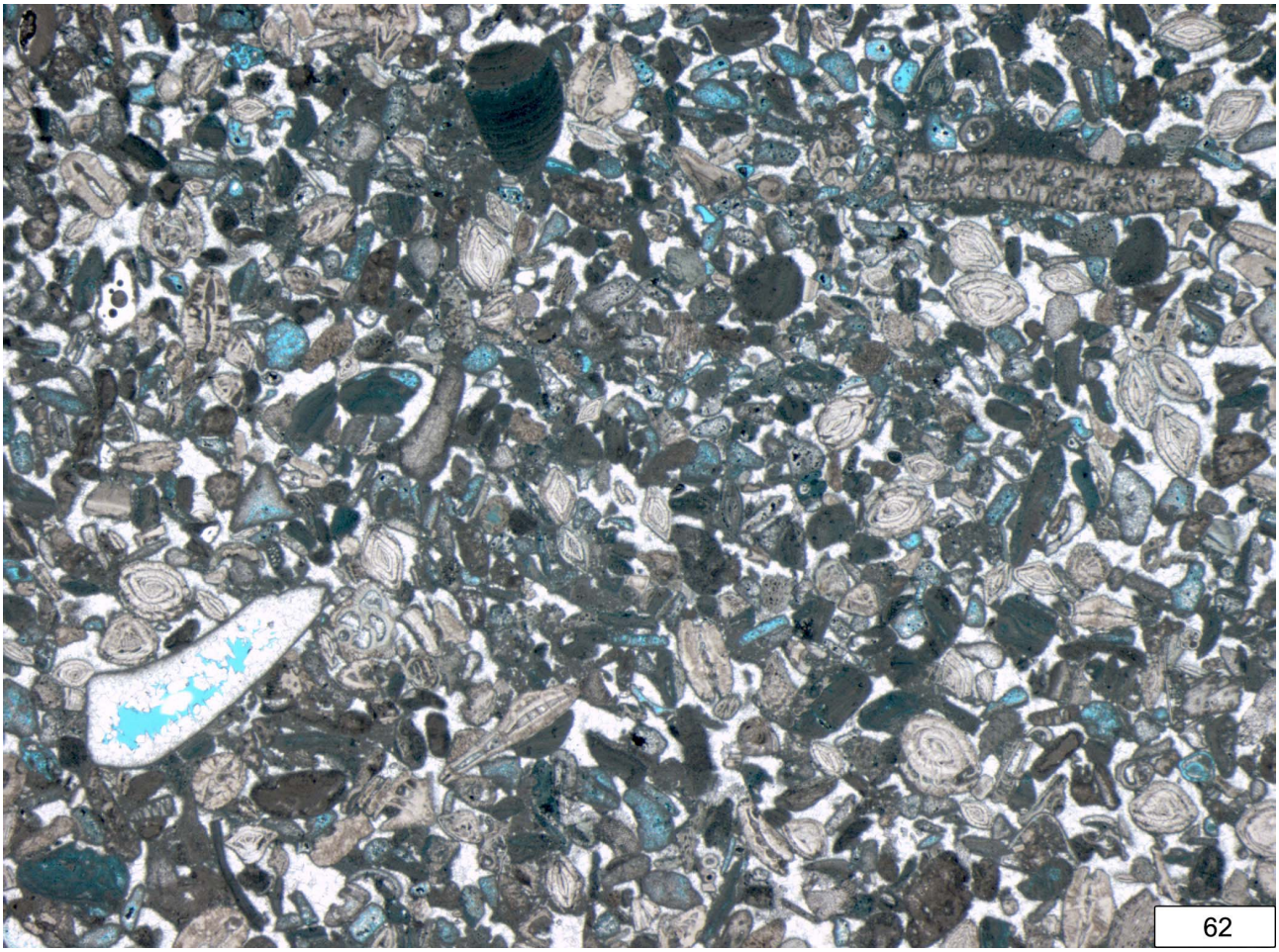


Plate AP1 (continued).



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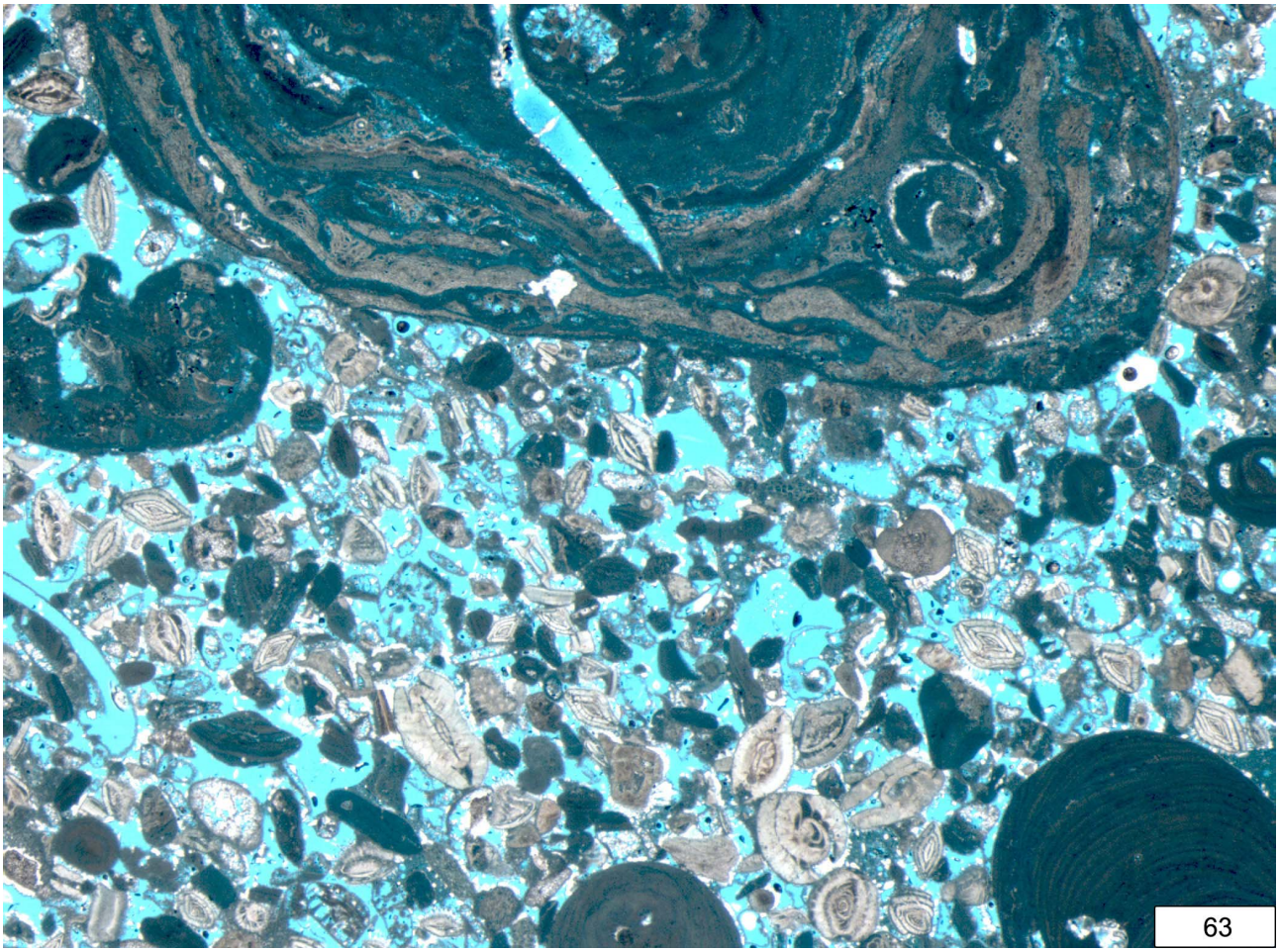

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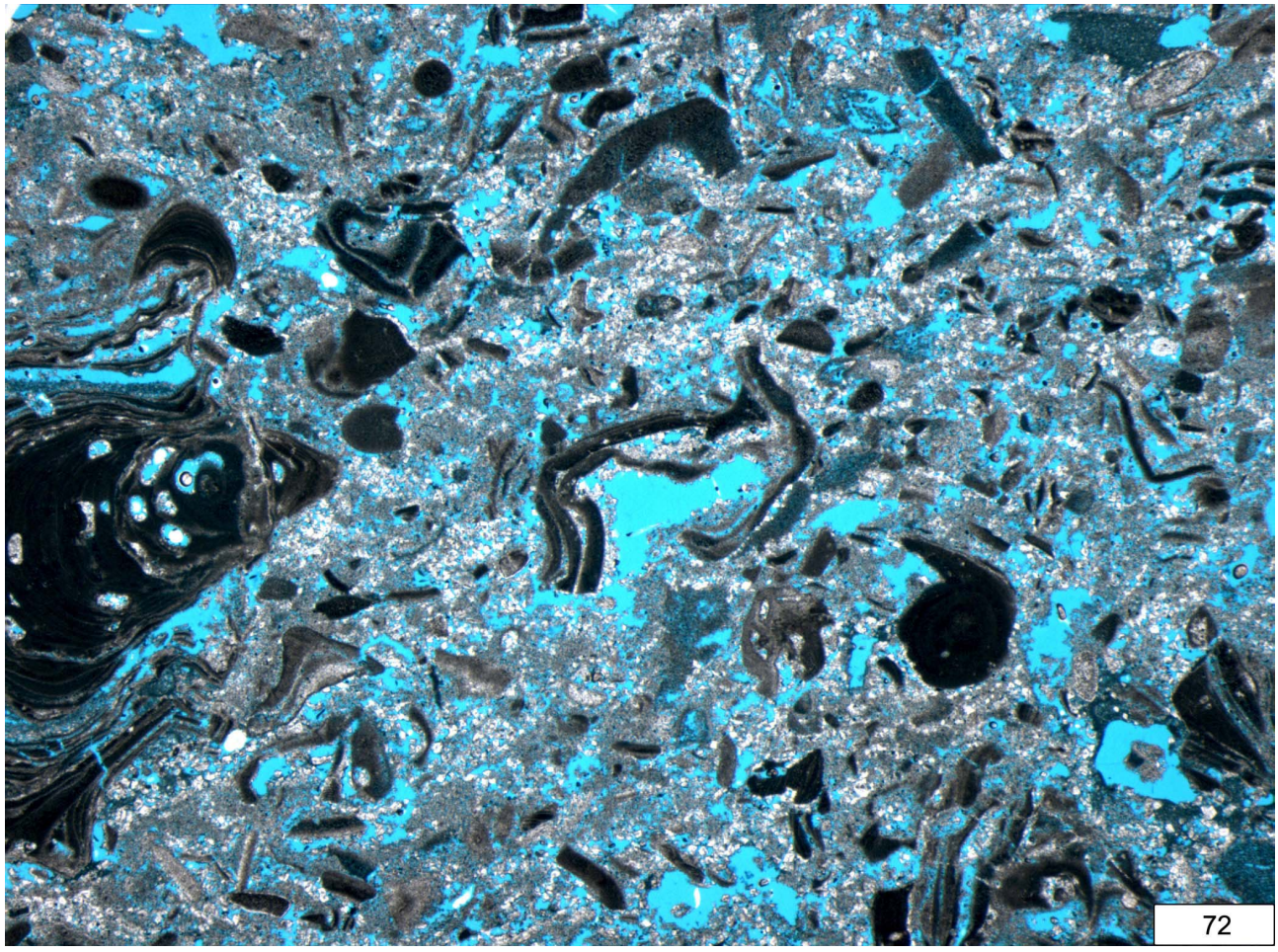

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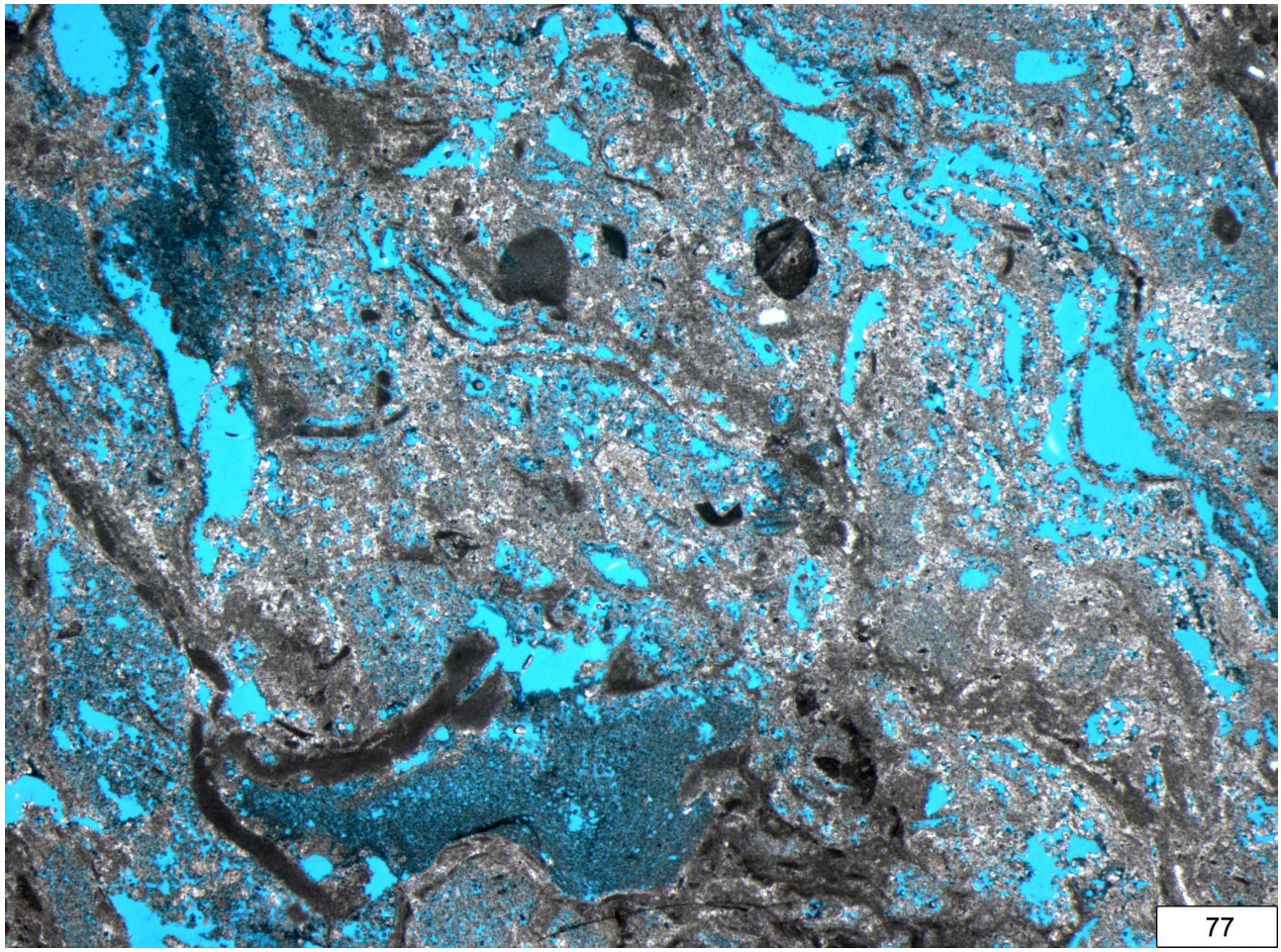

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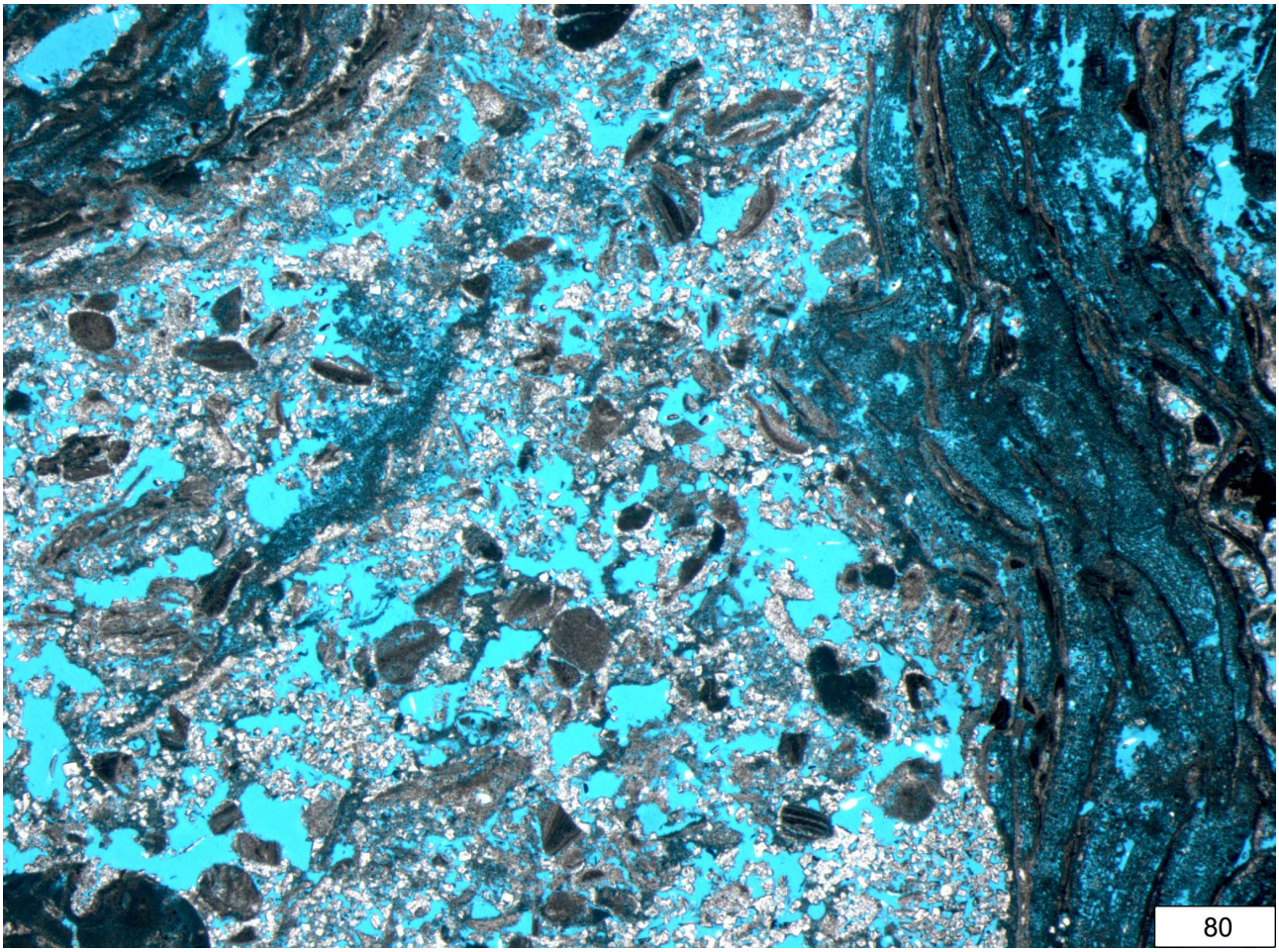

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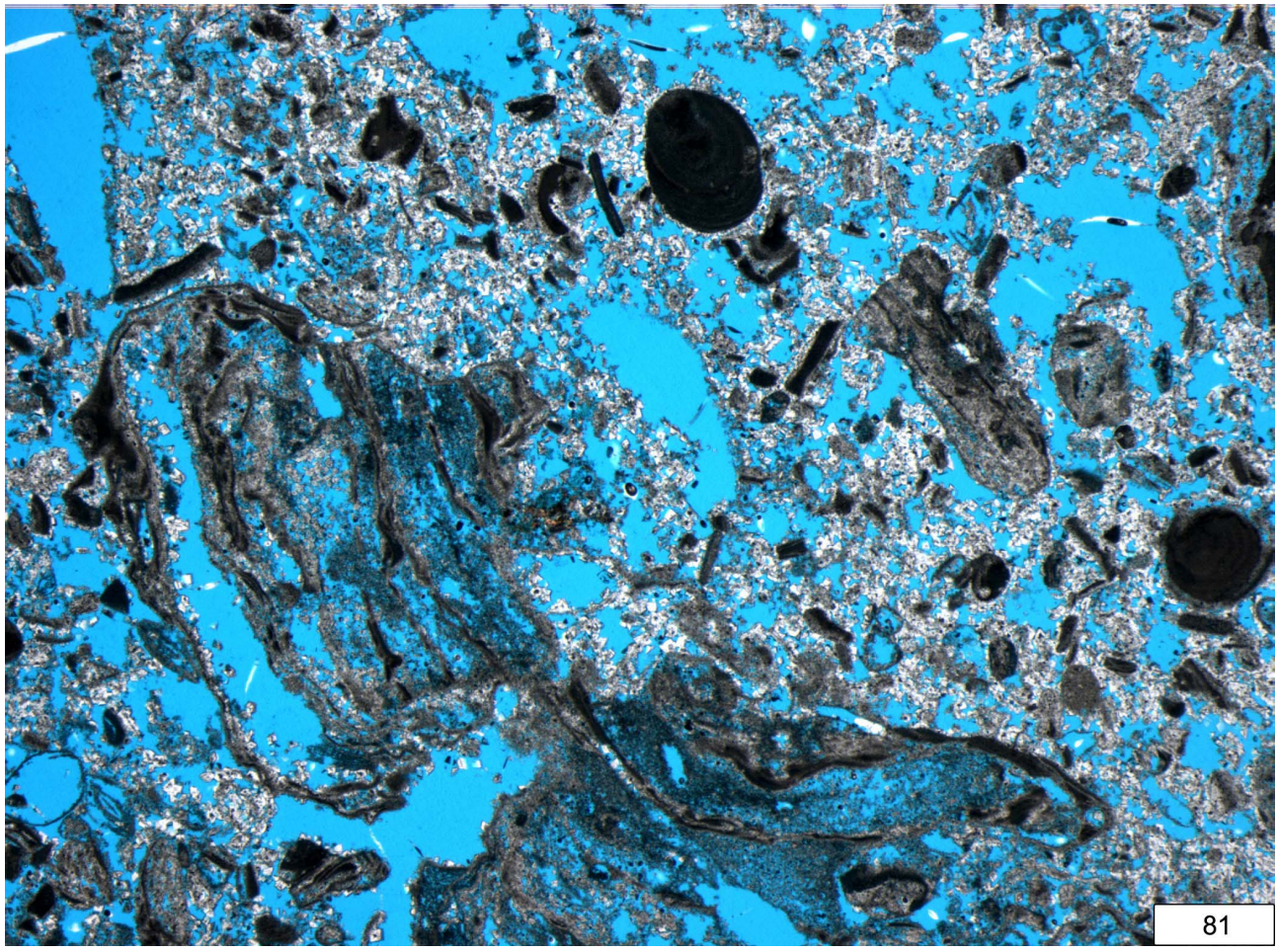

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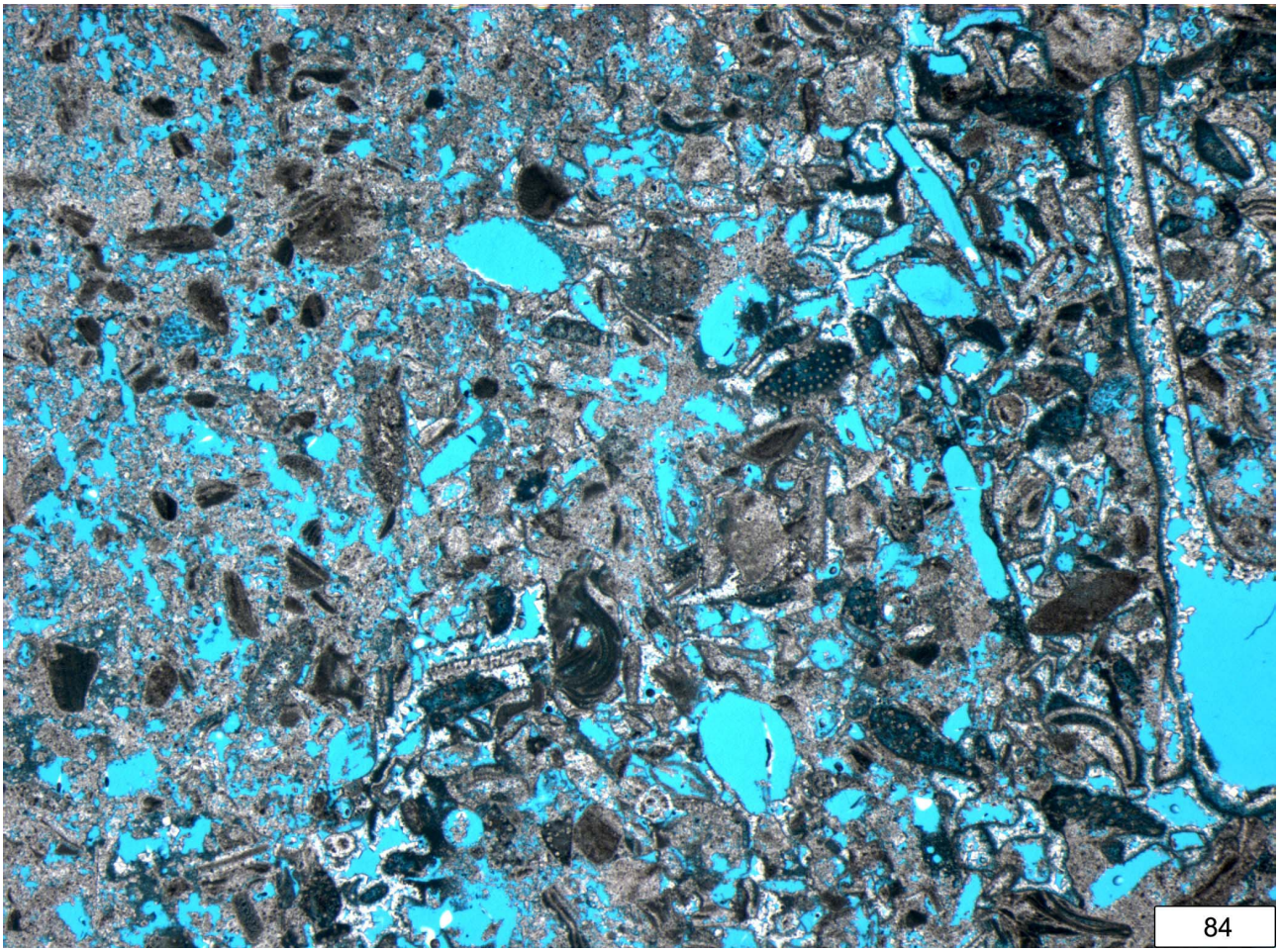

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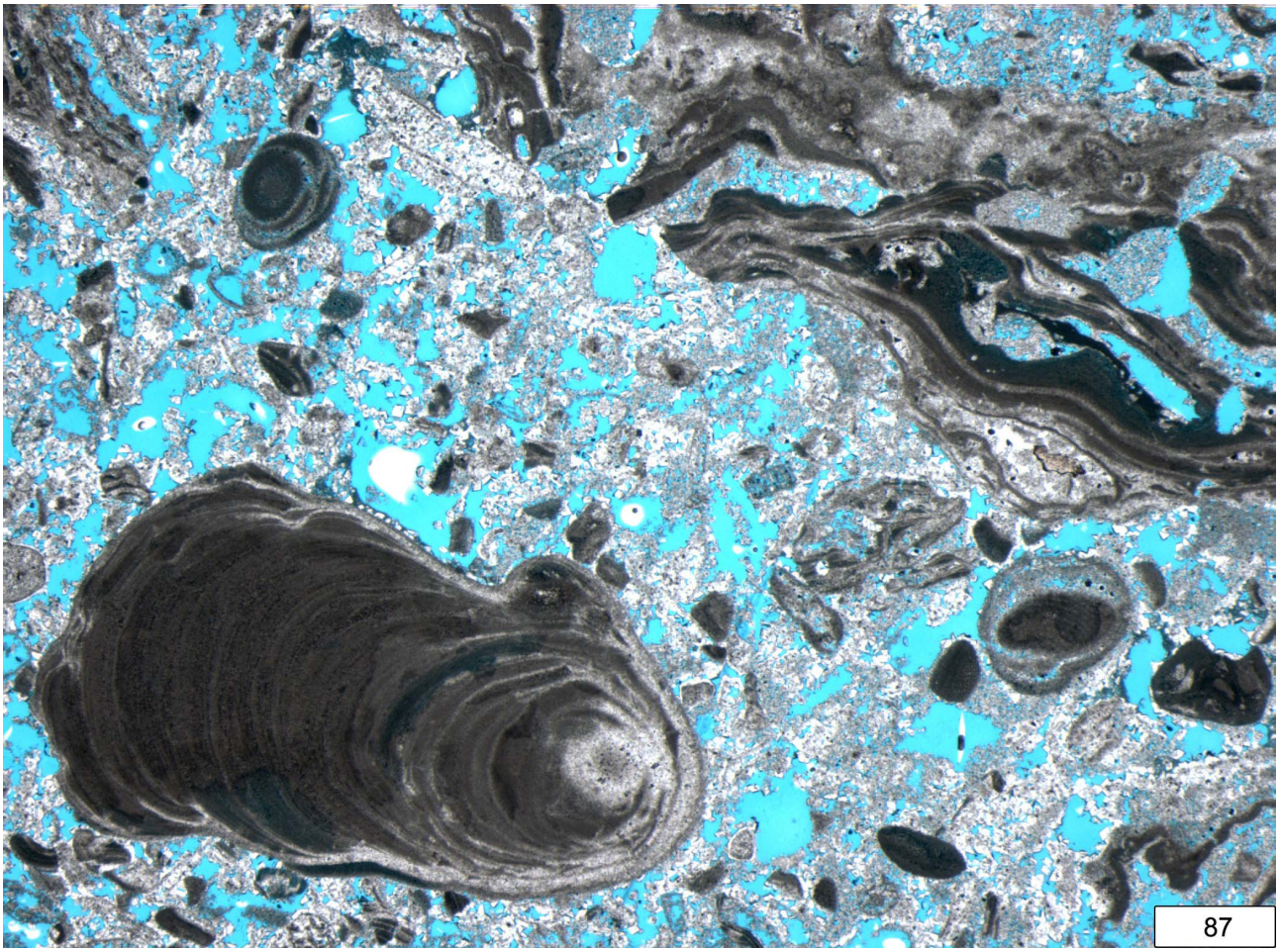

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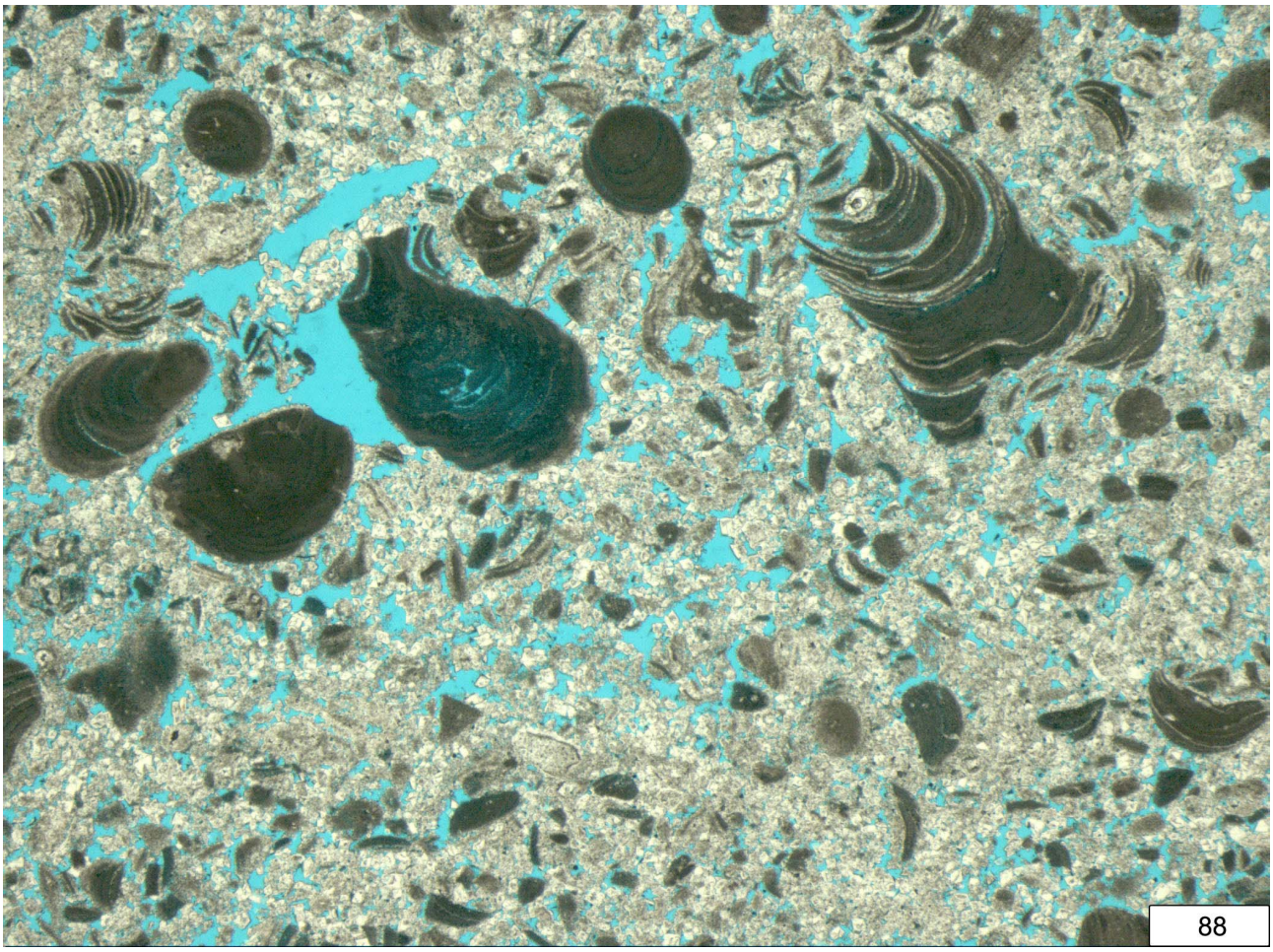

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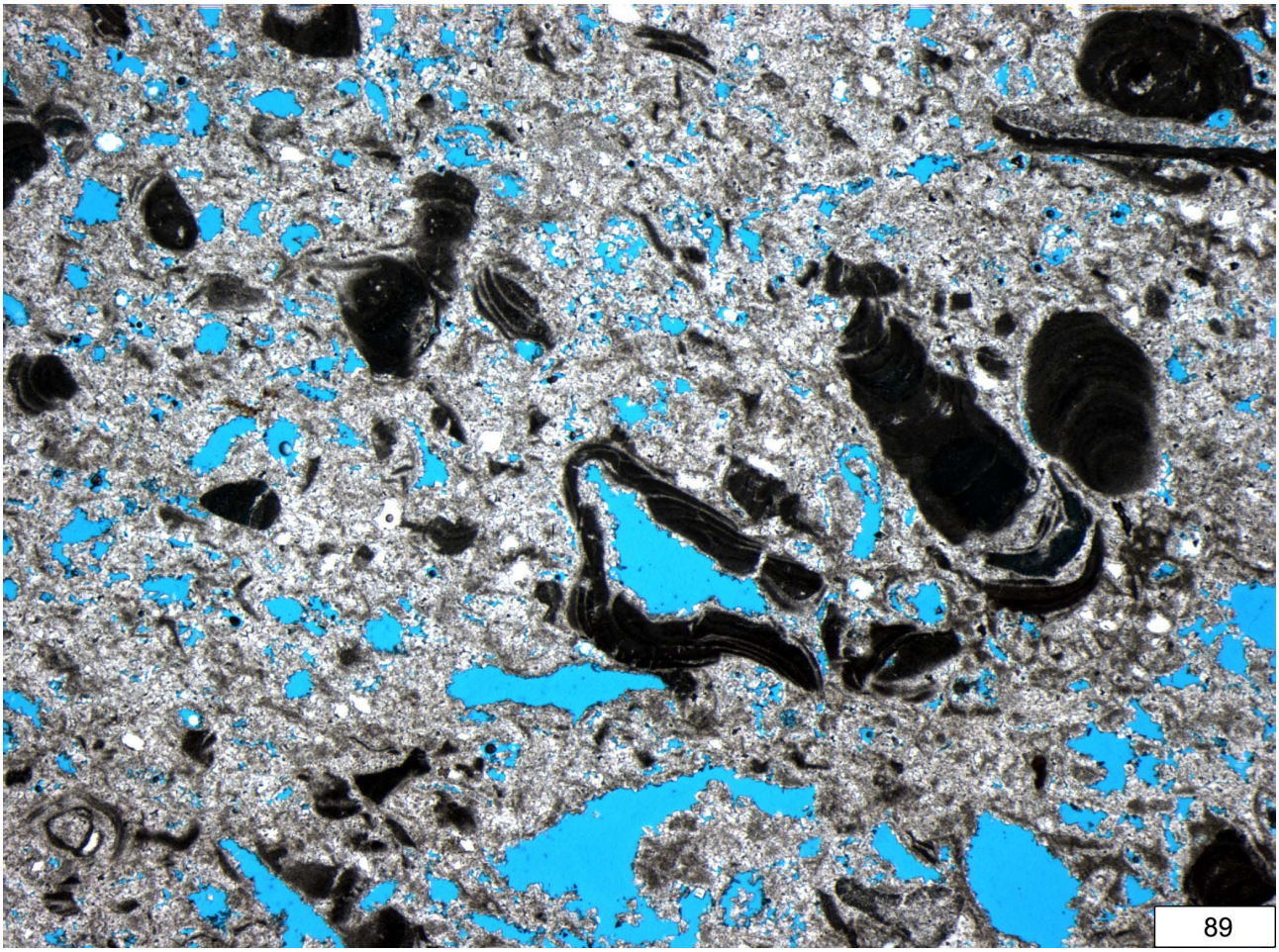

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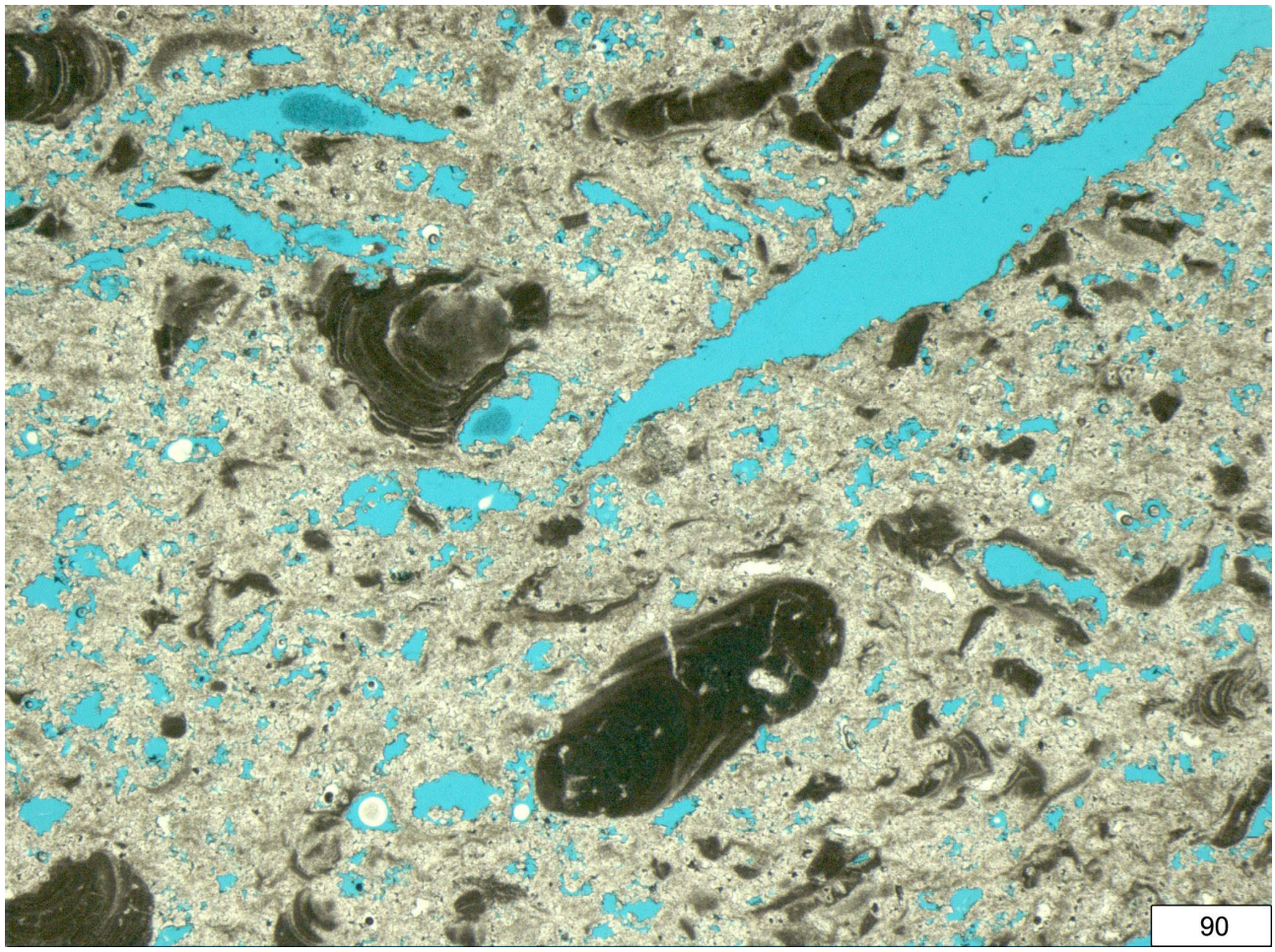

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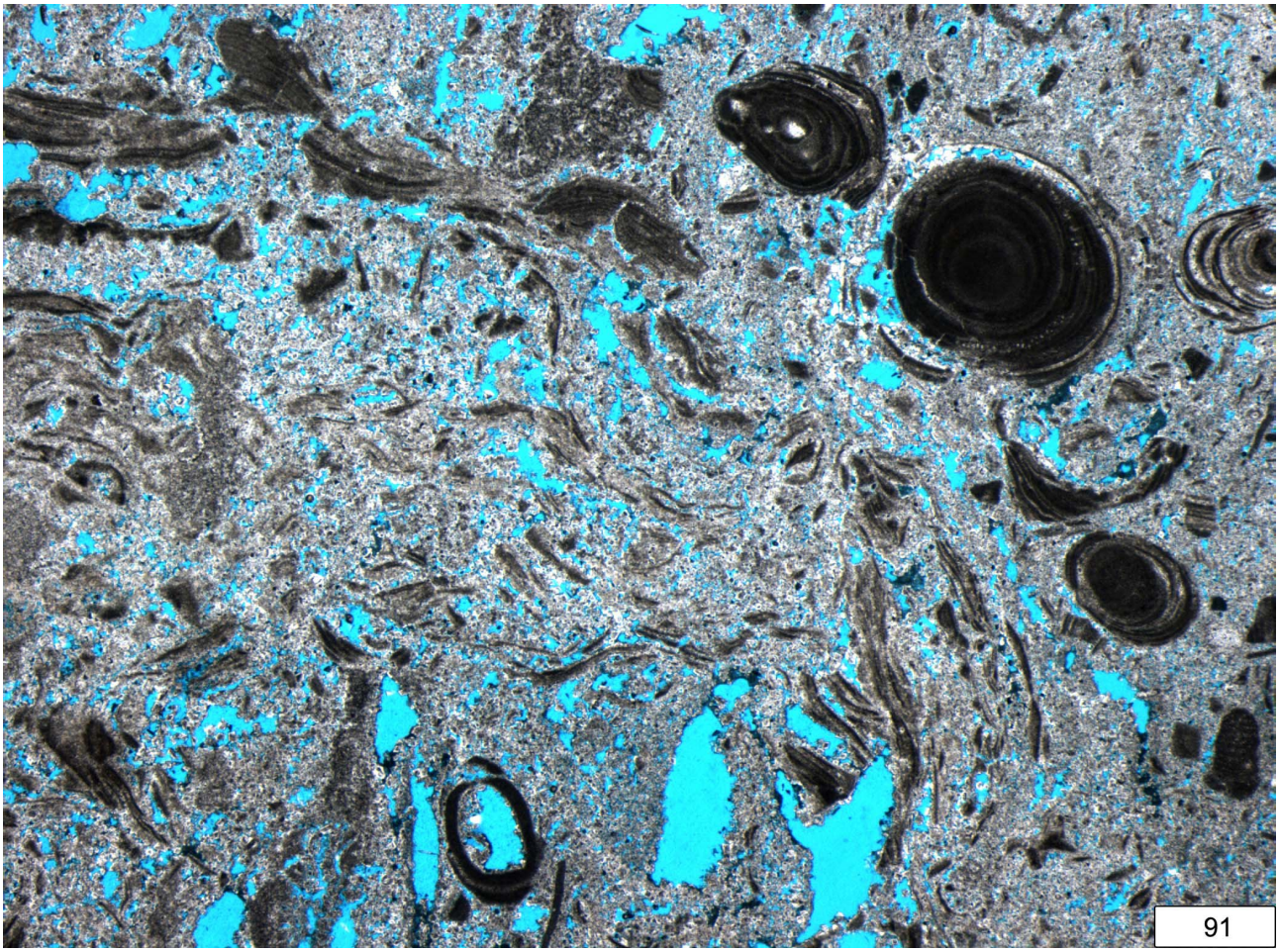

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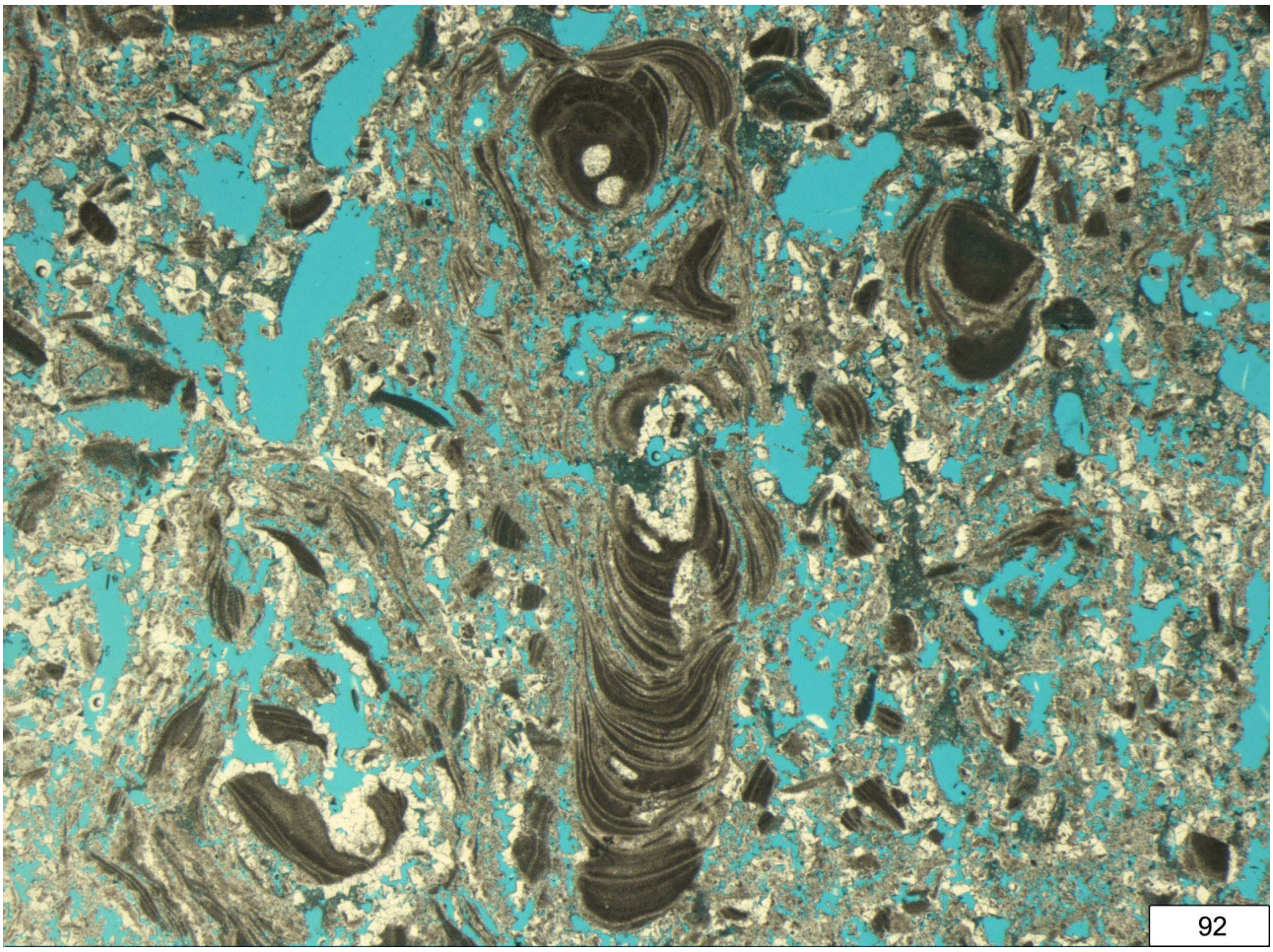

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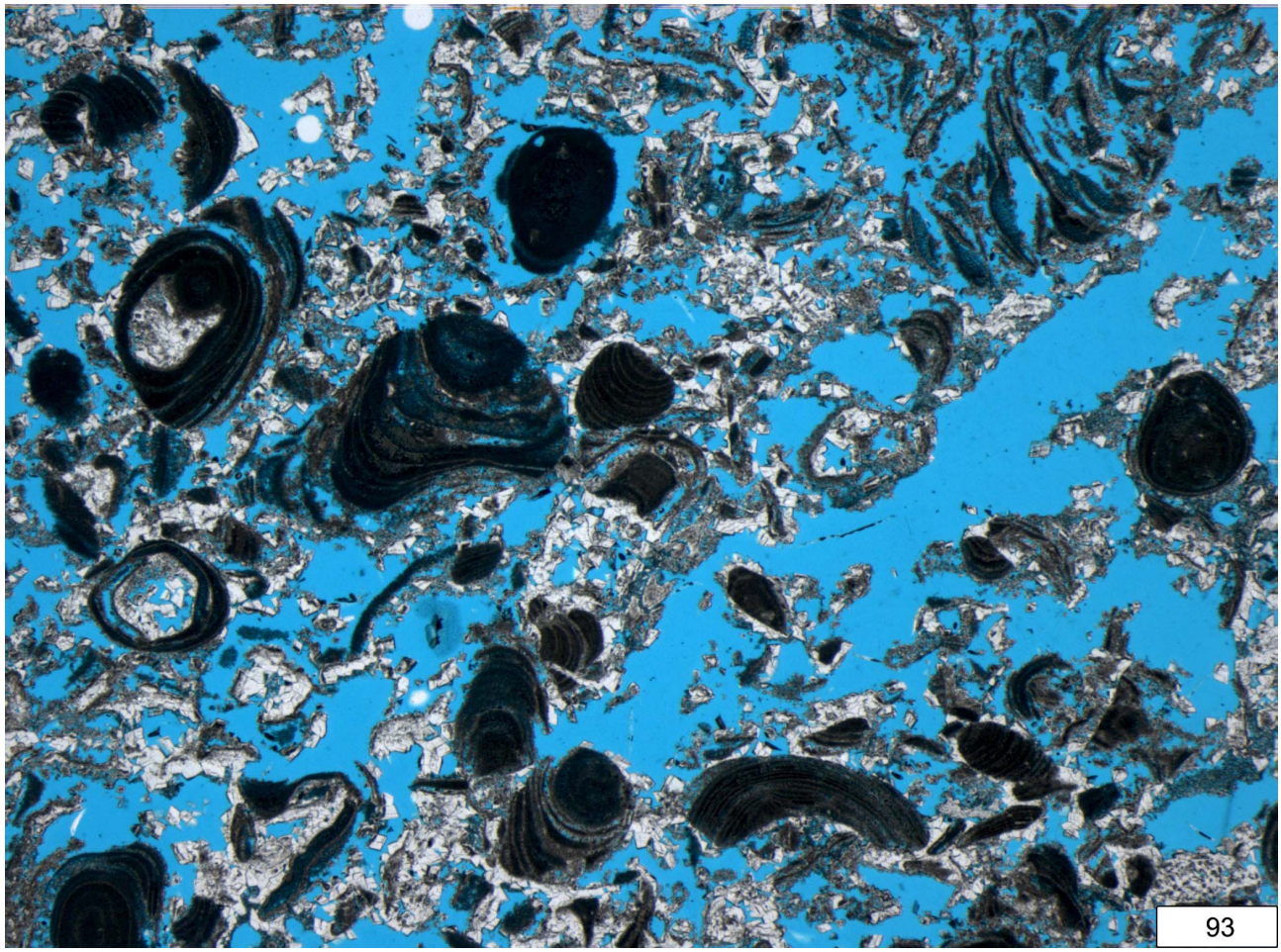

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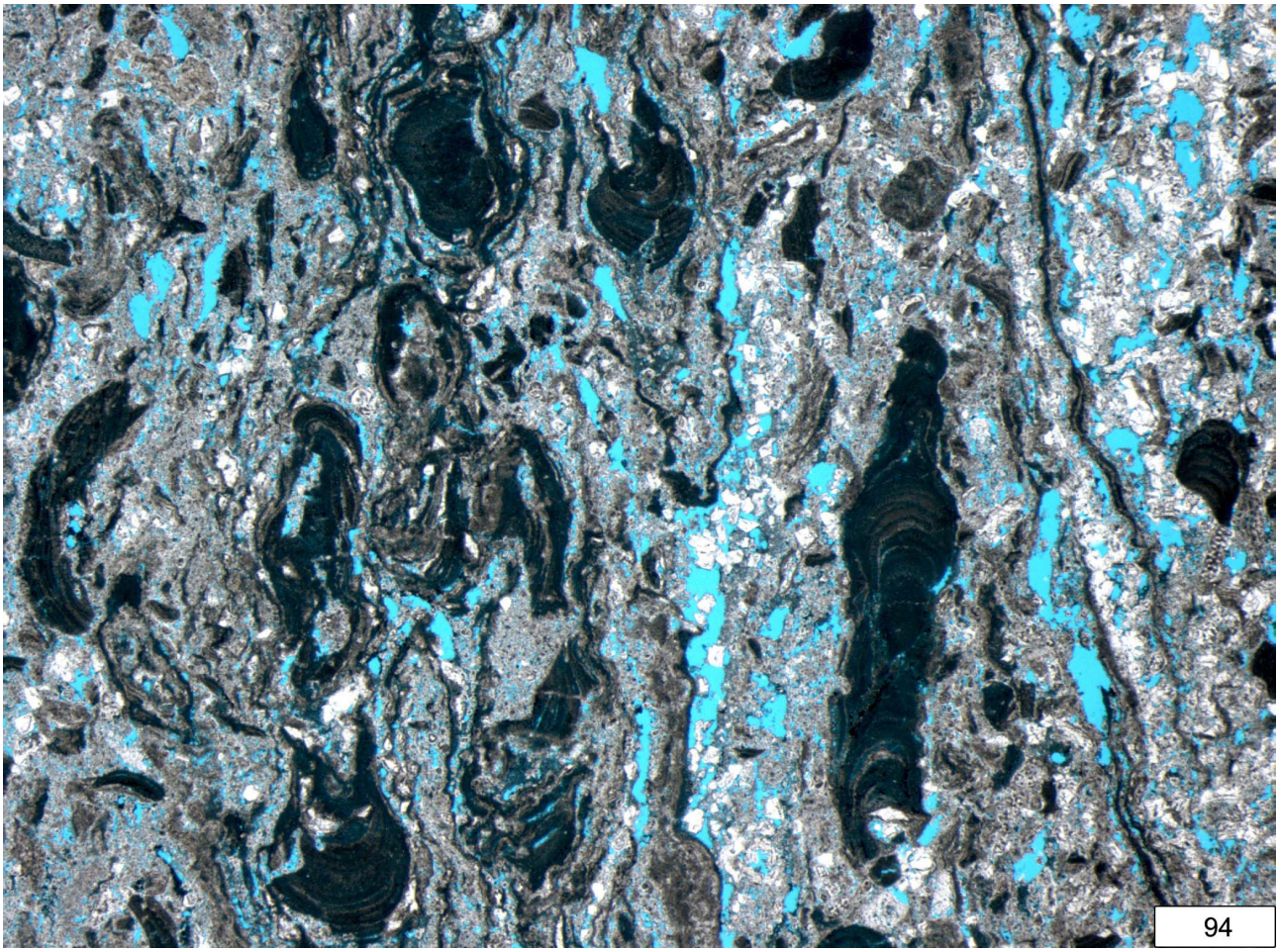

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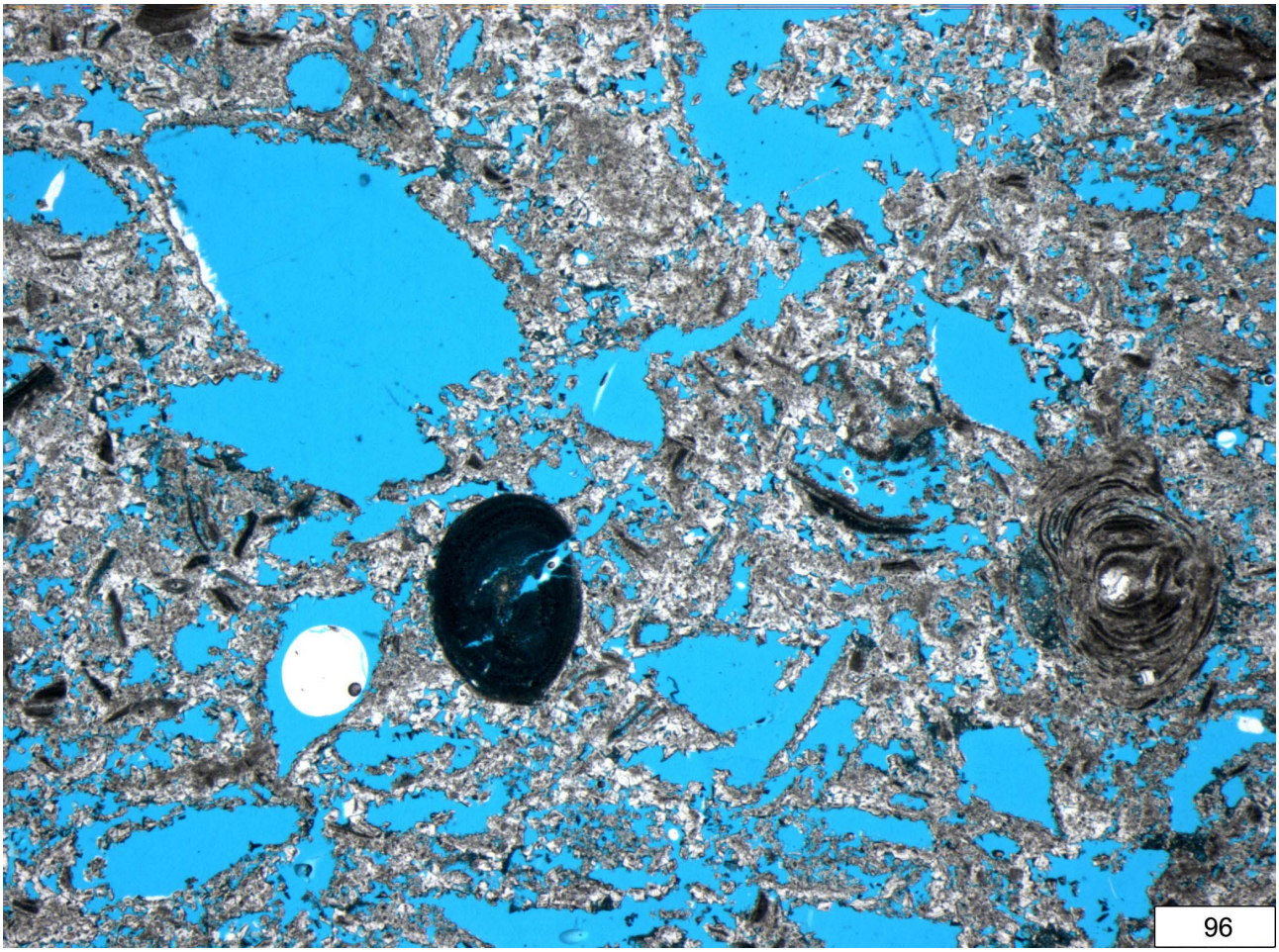

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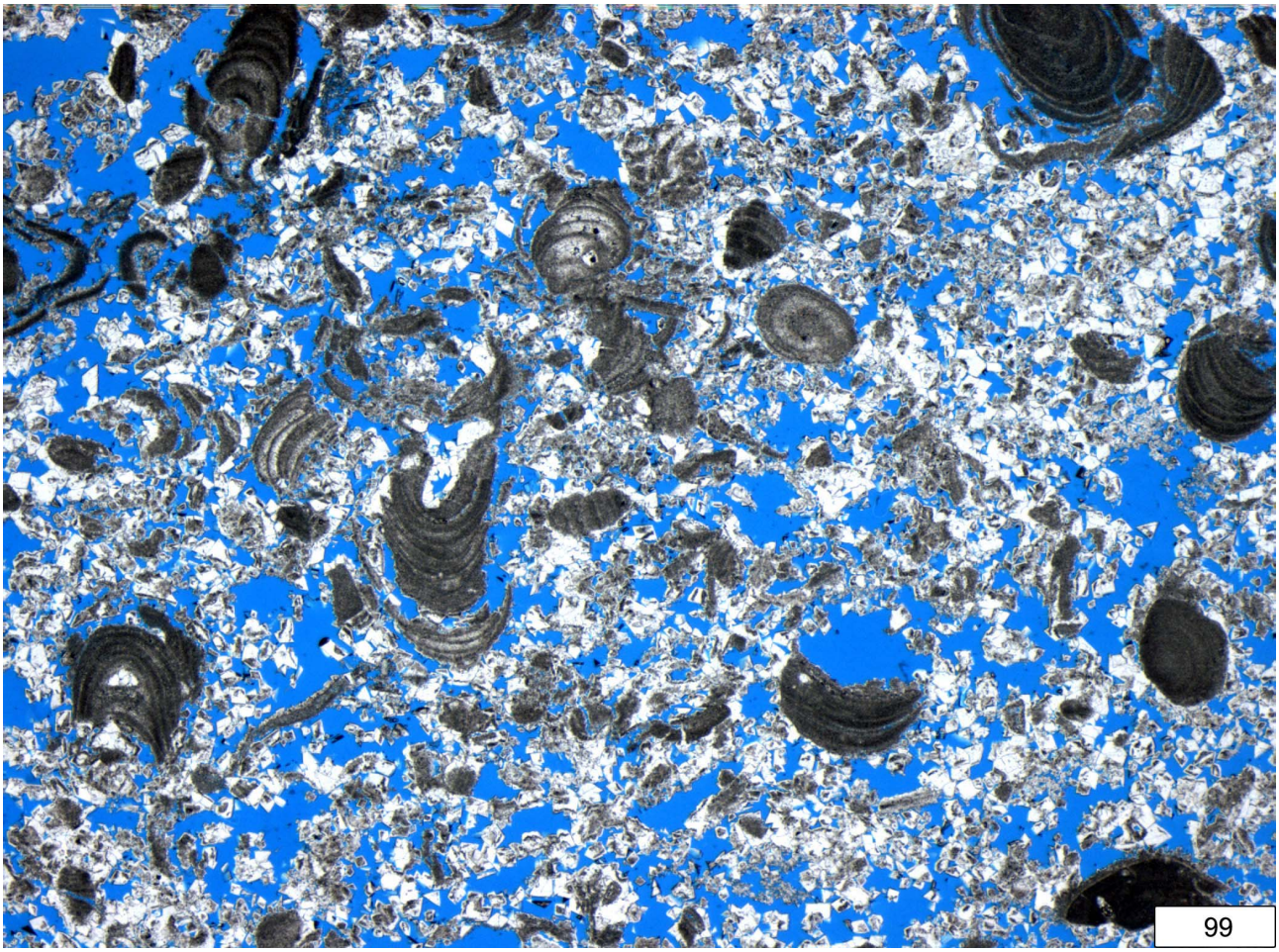

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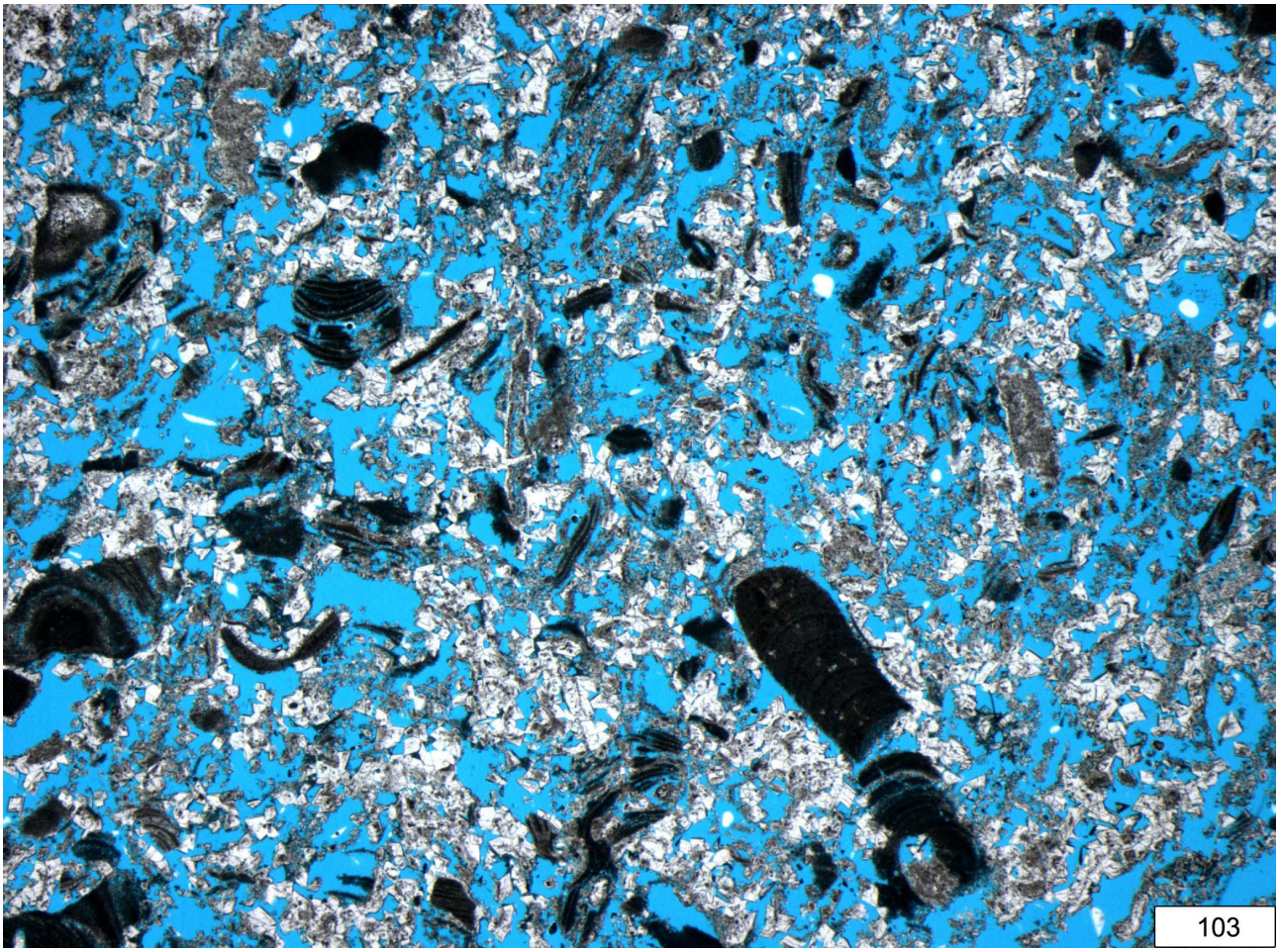

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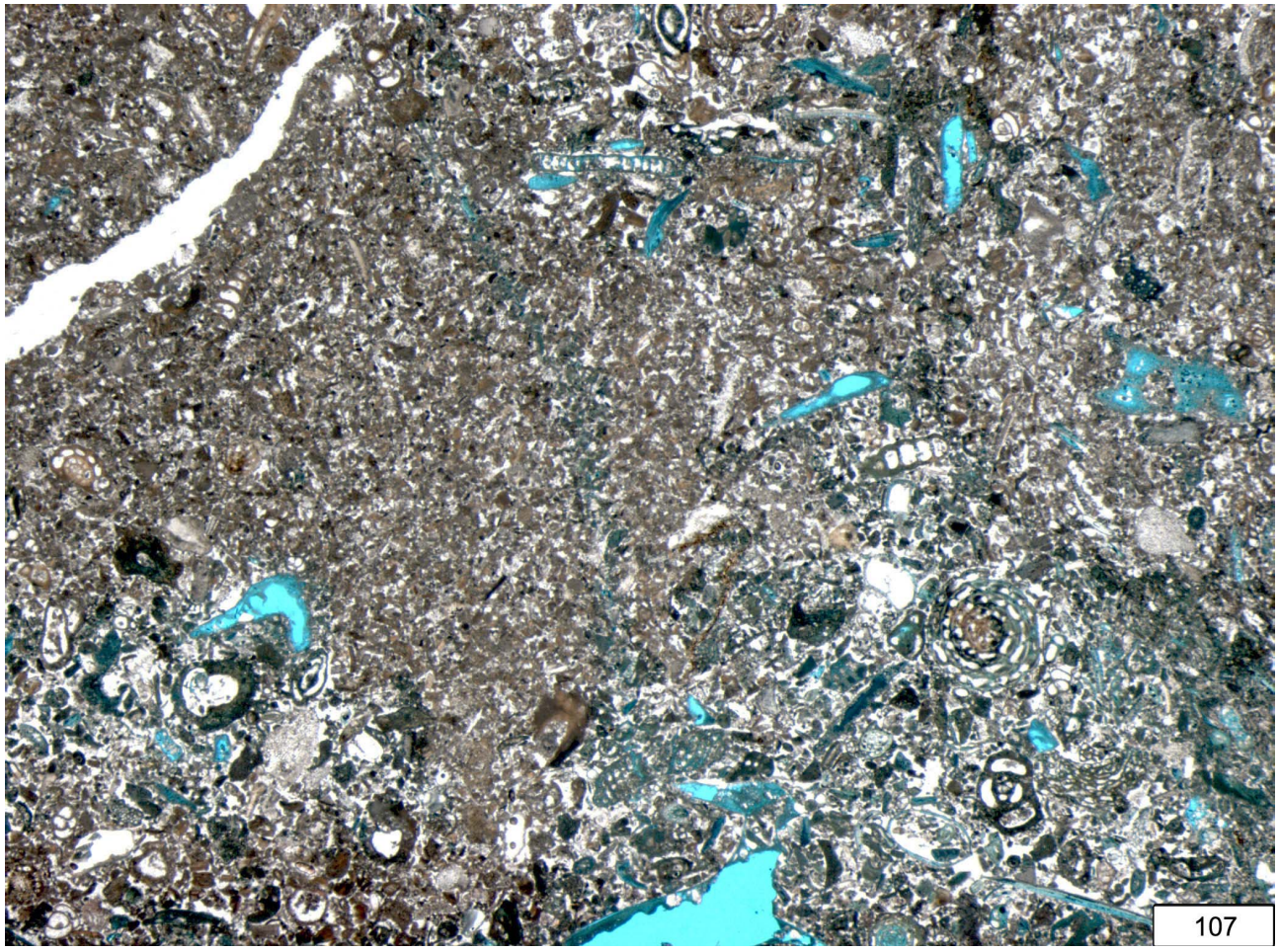

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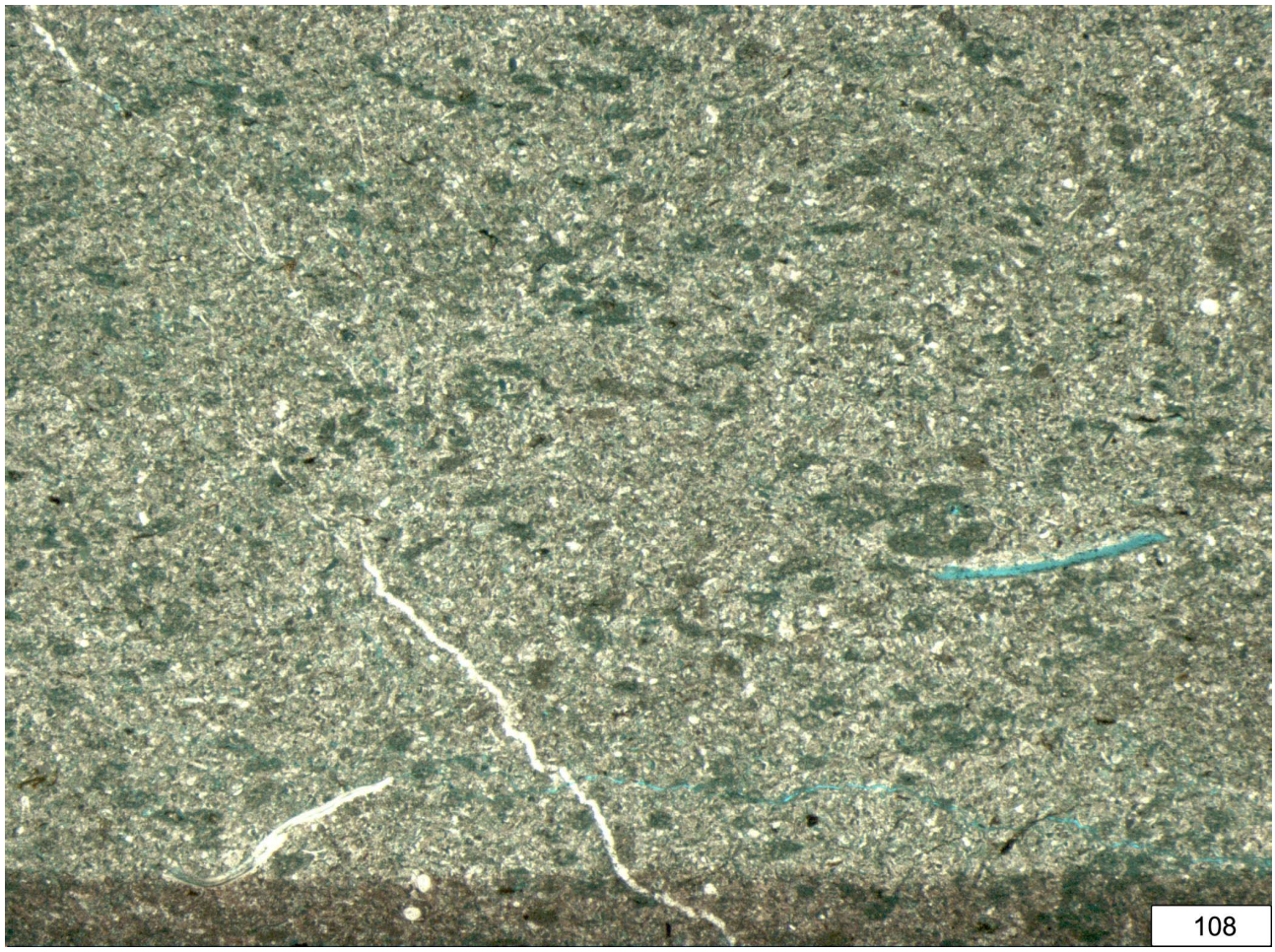

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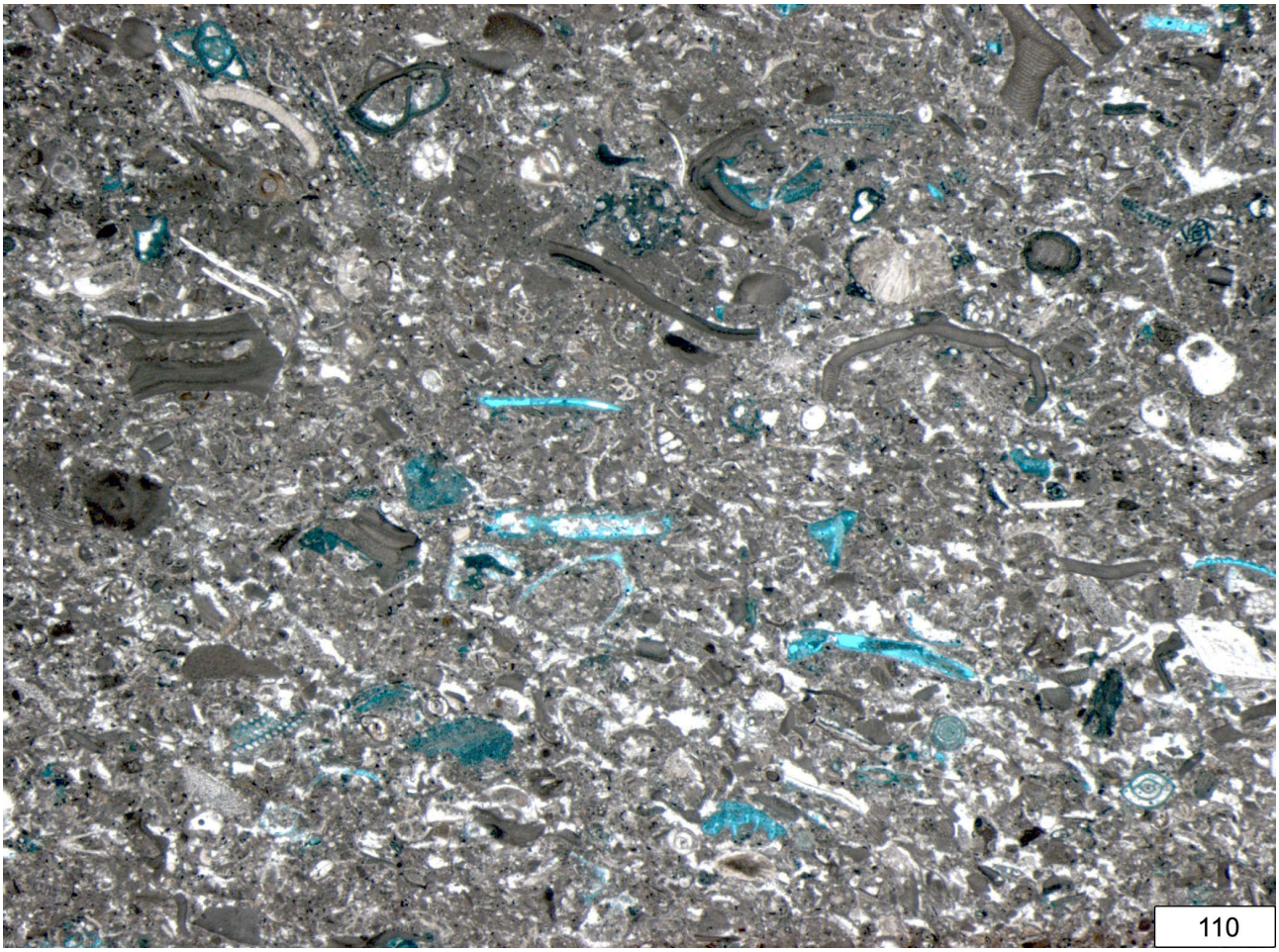

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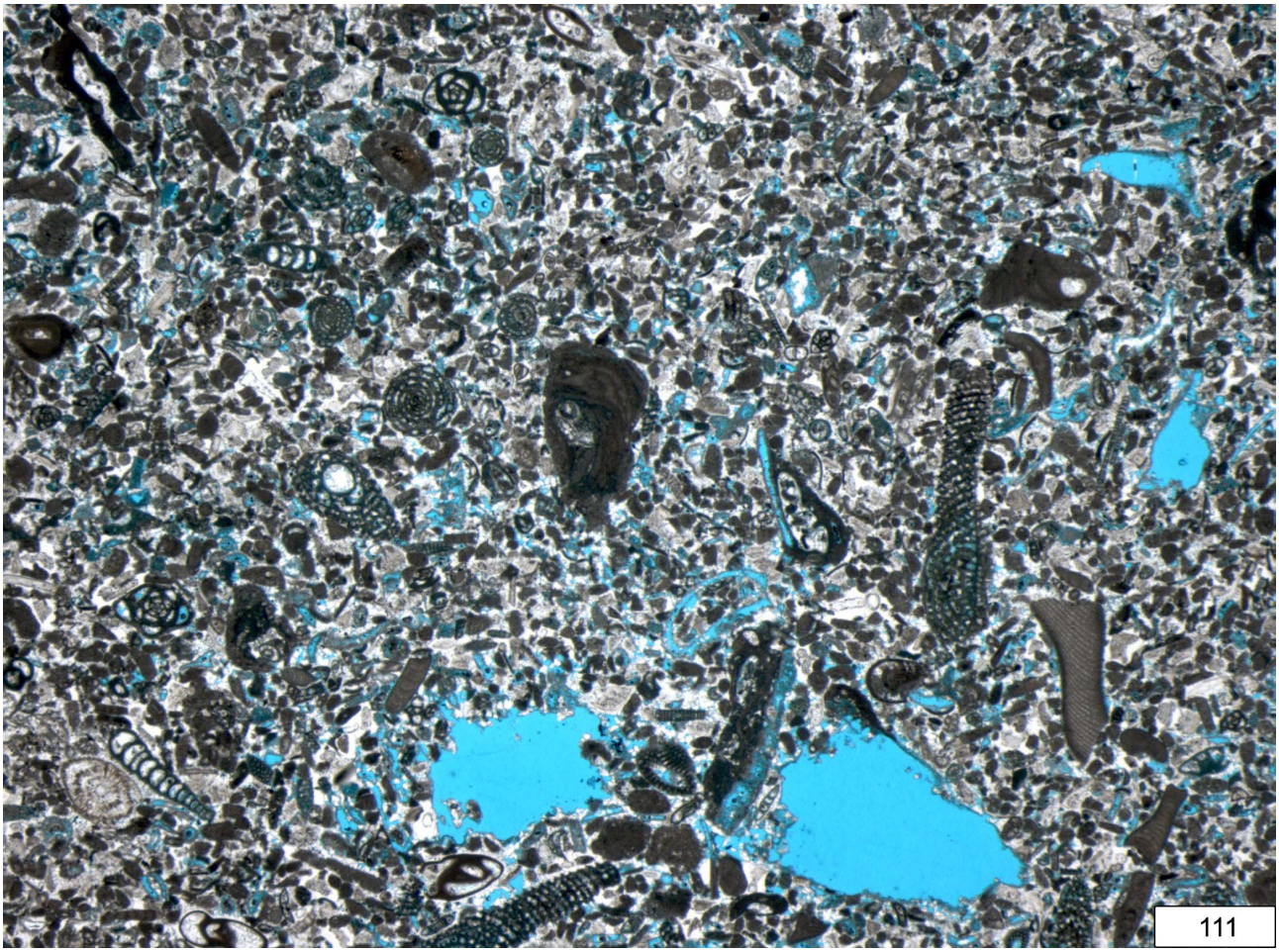

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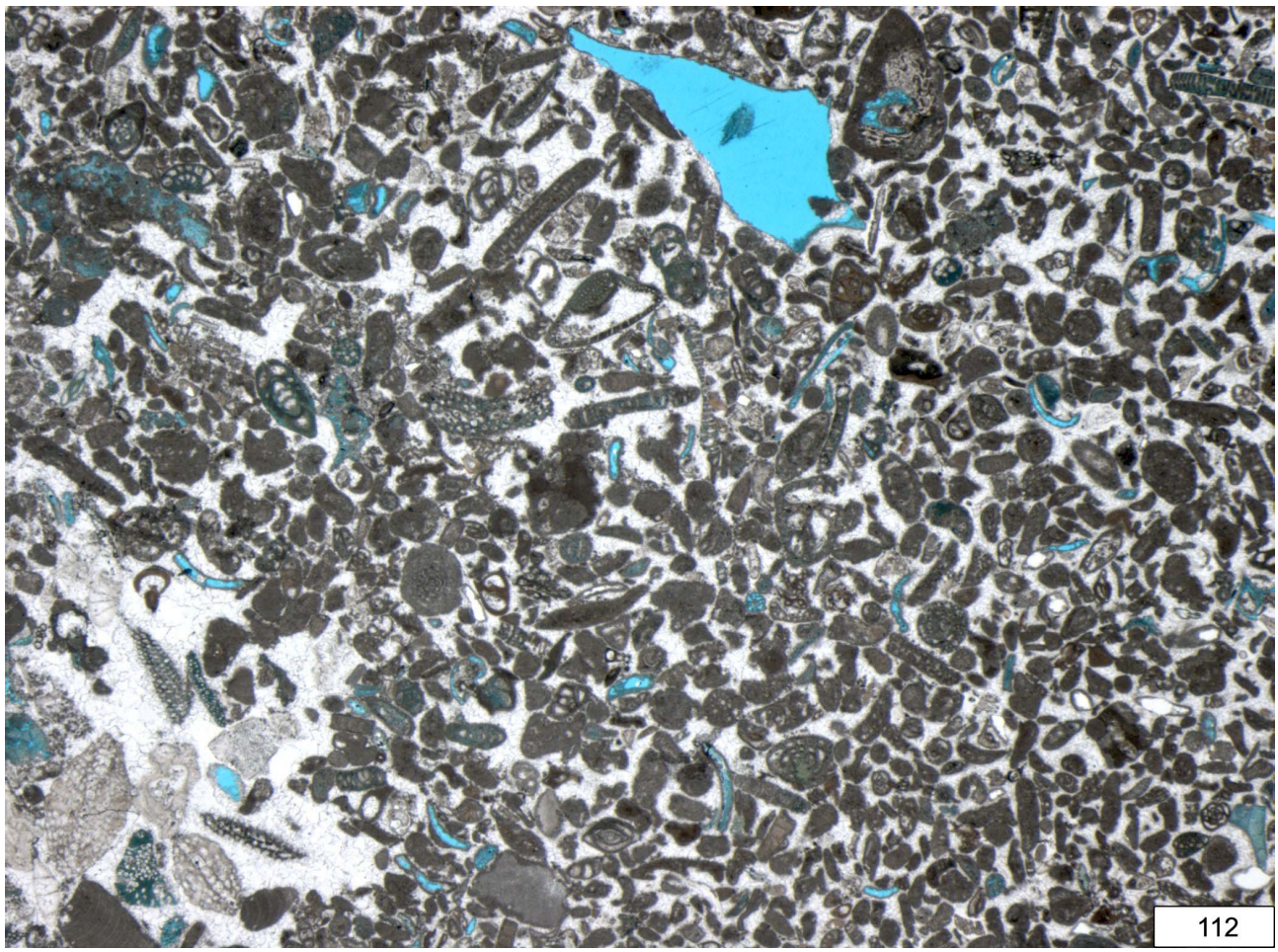

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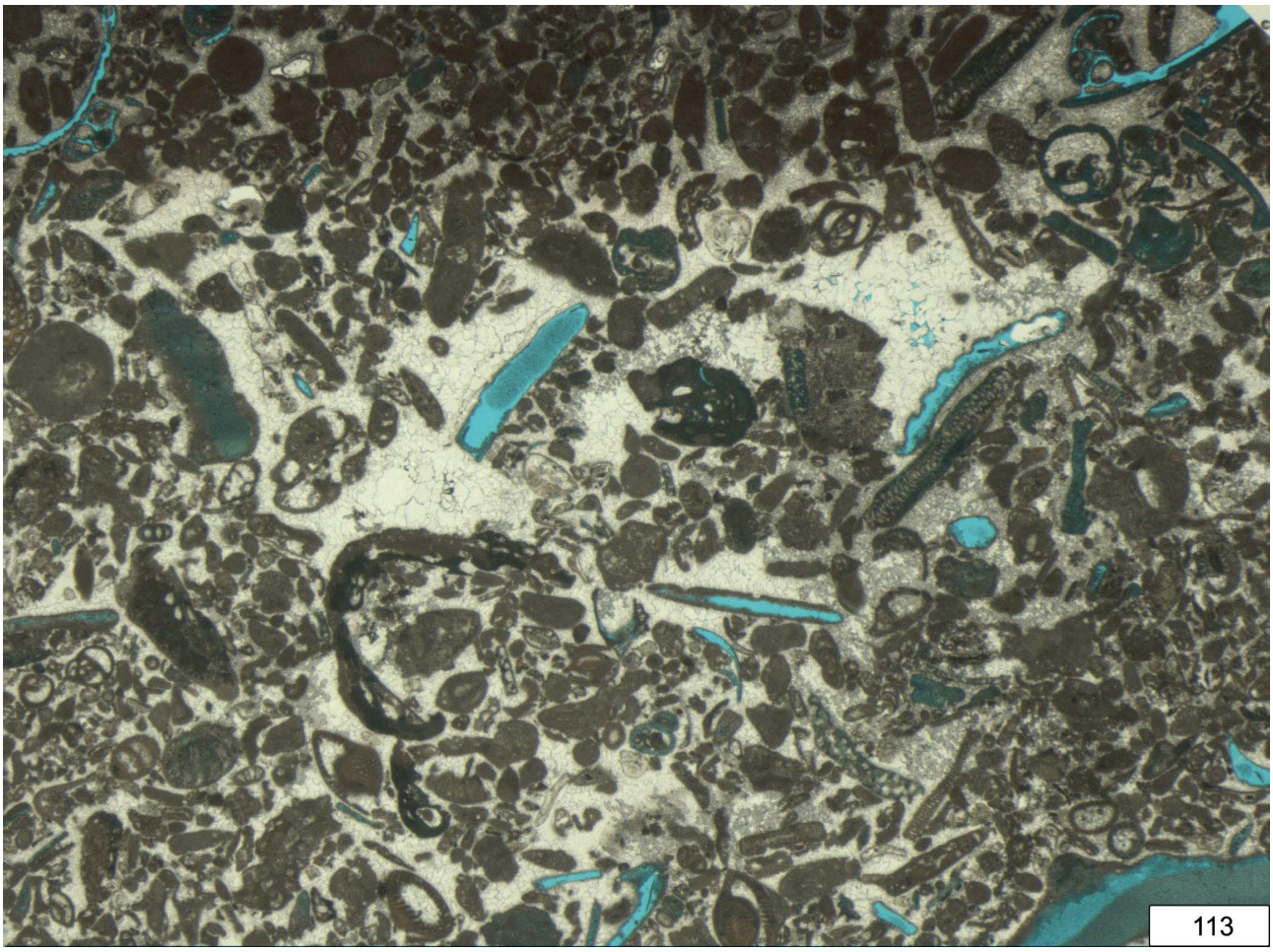

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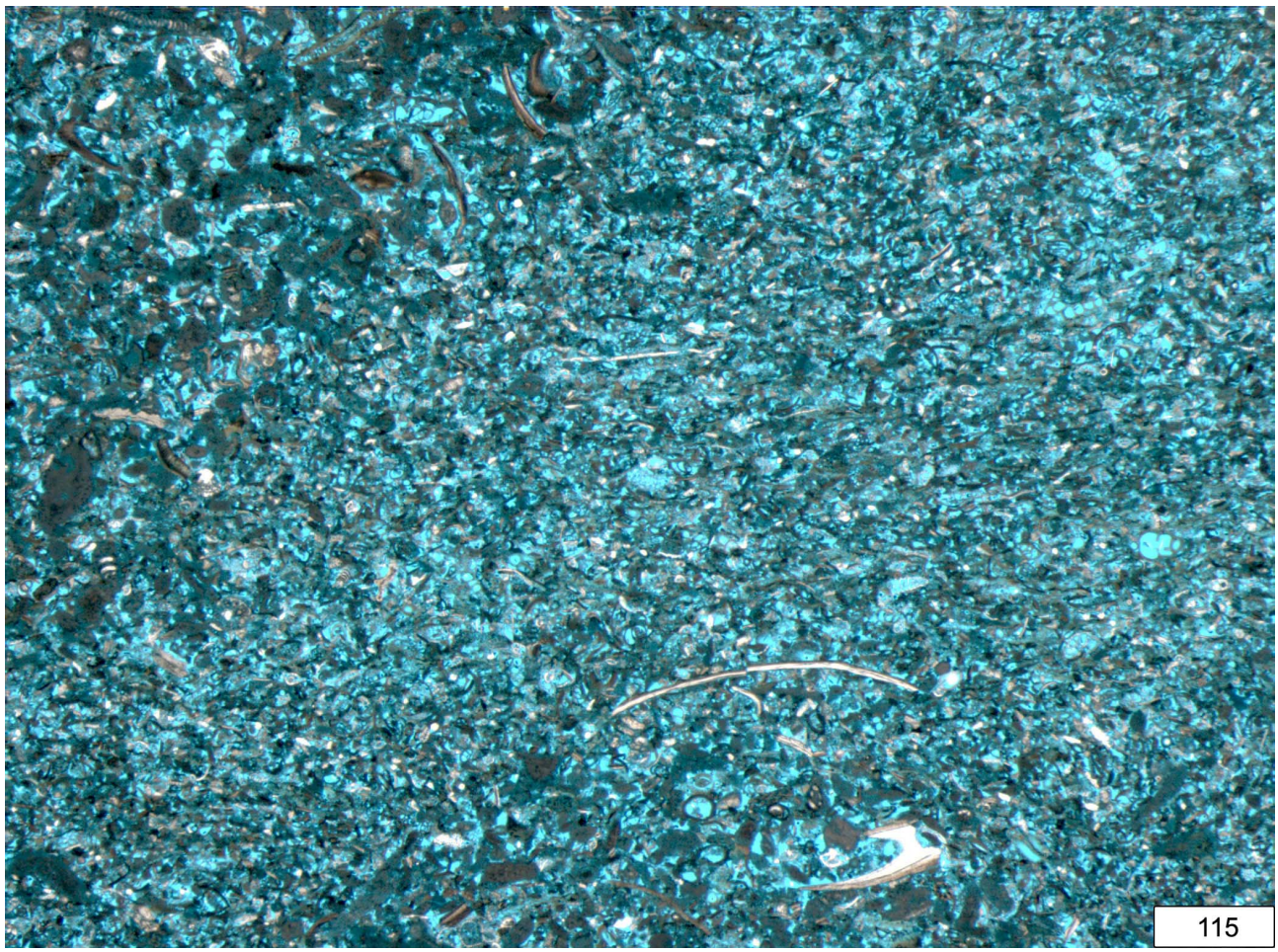

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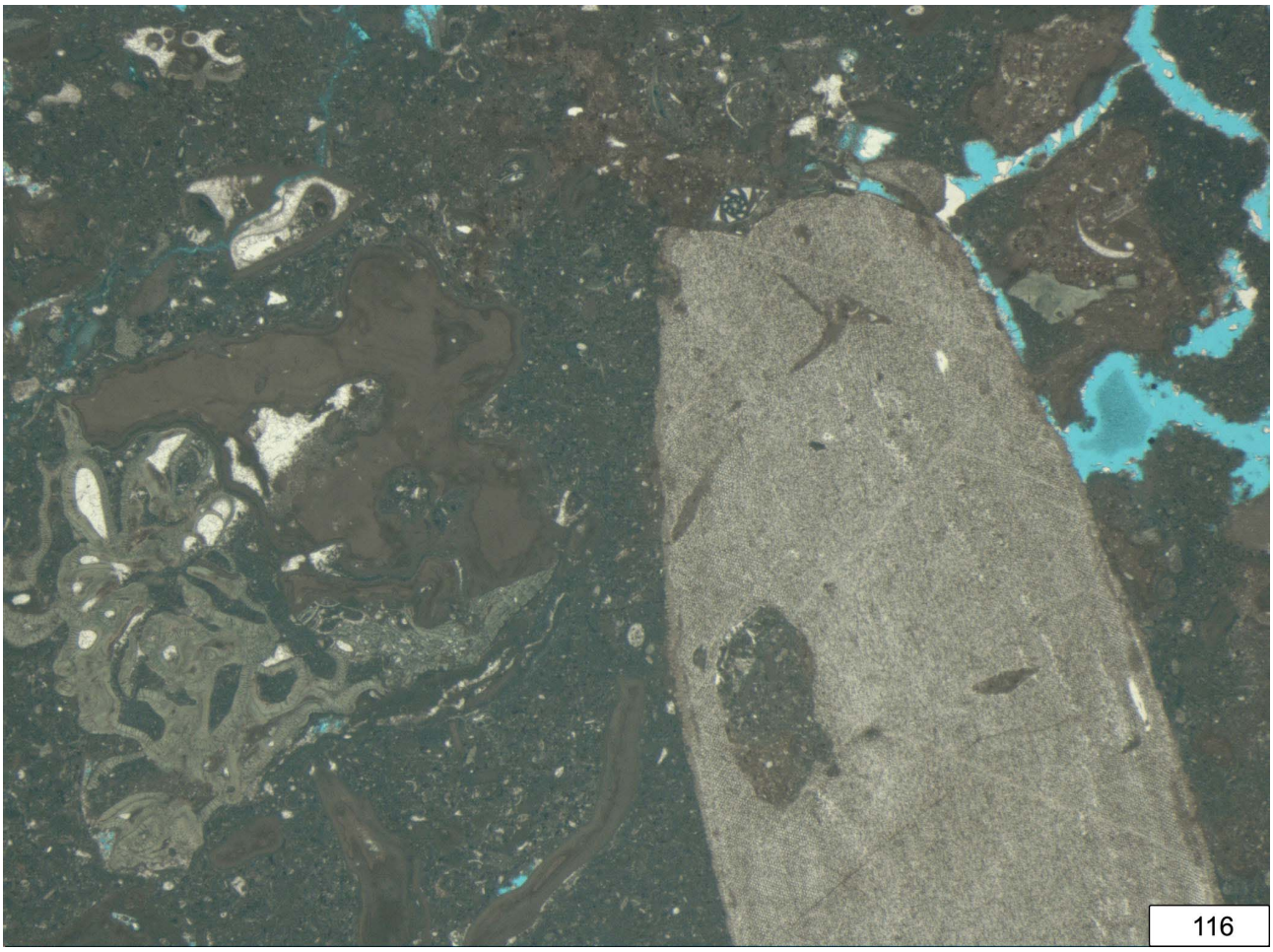

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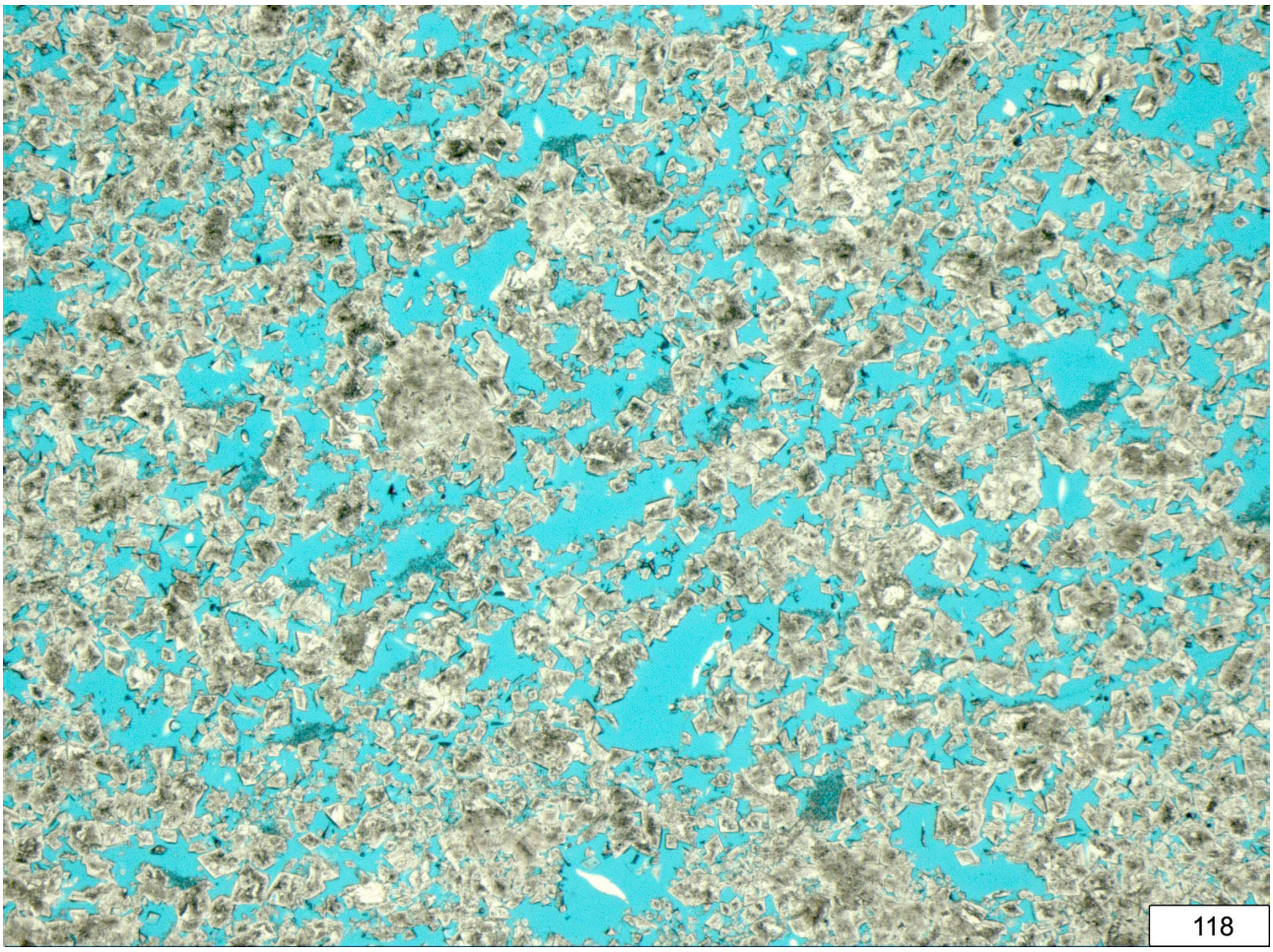

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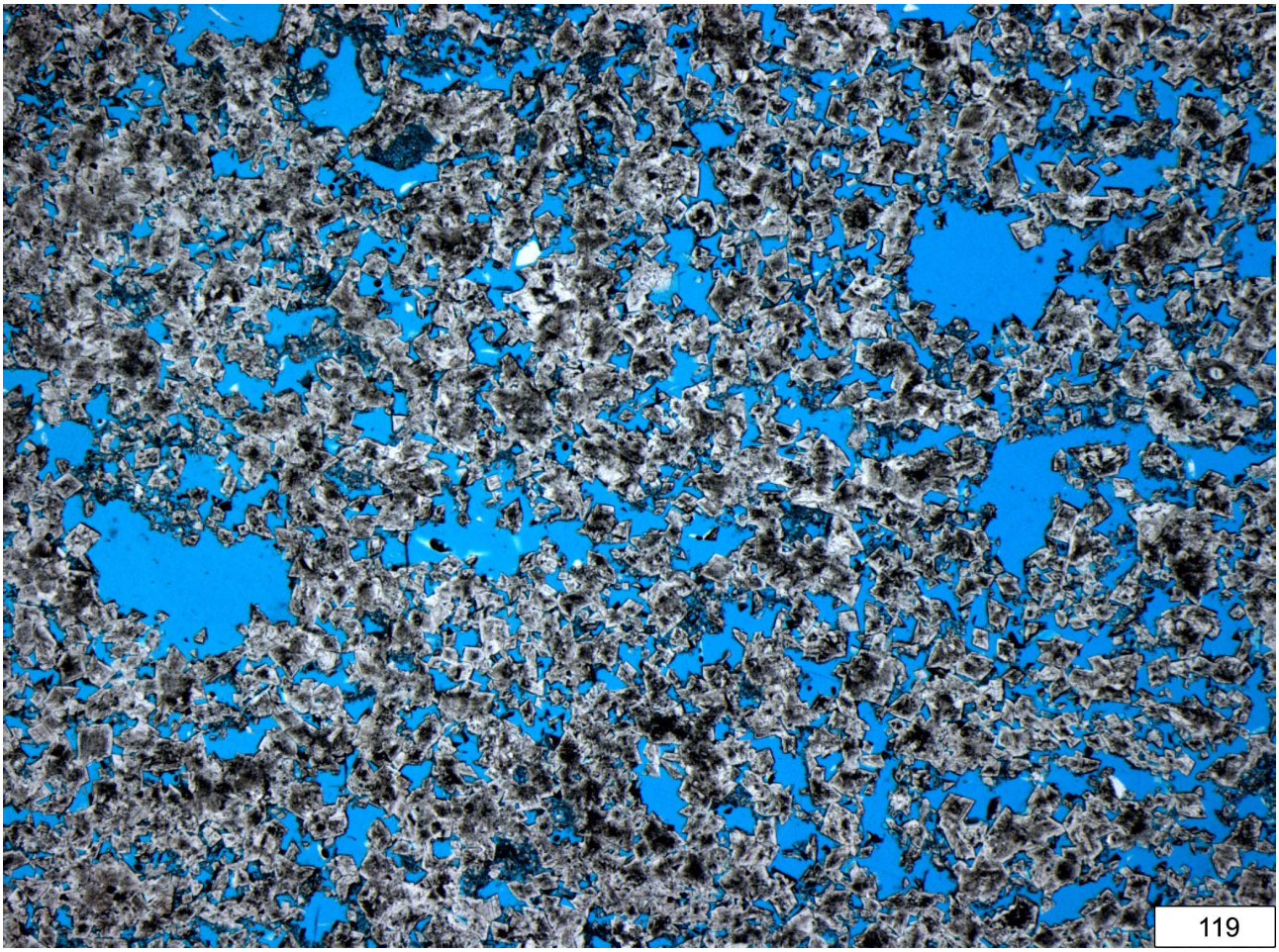

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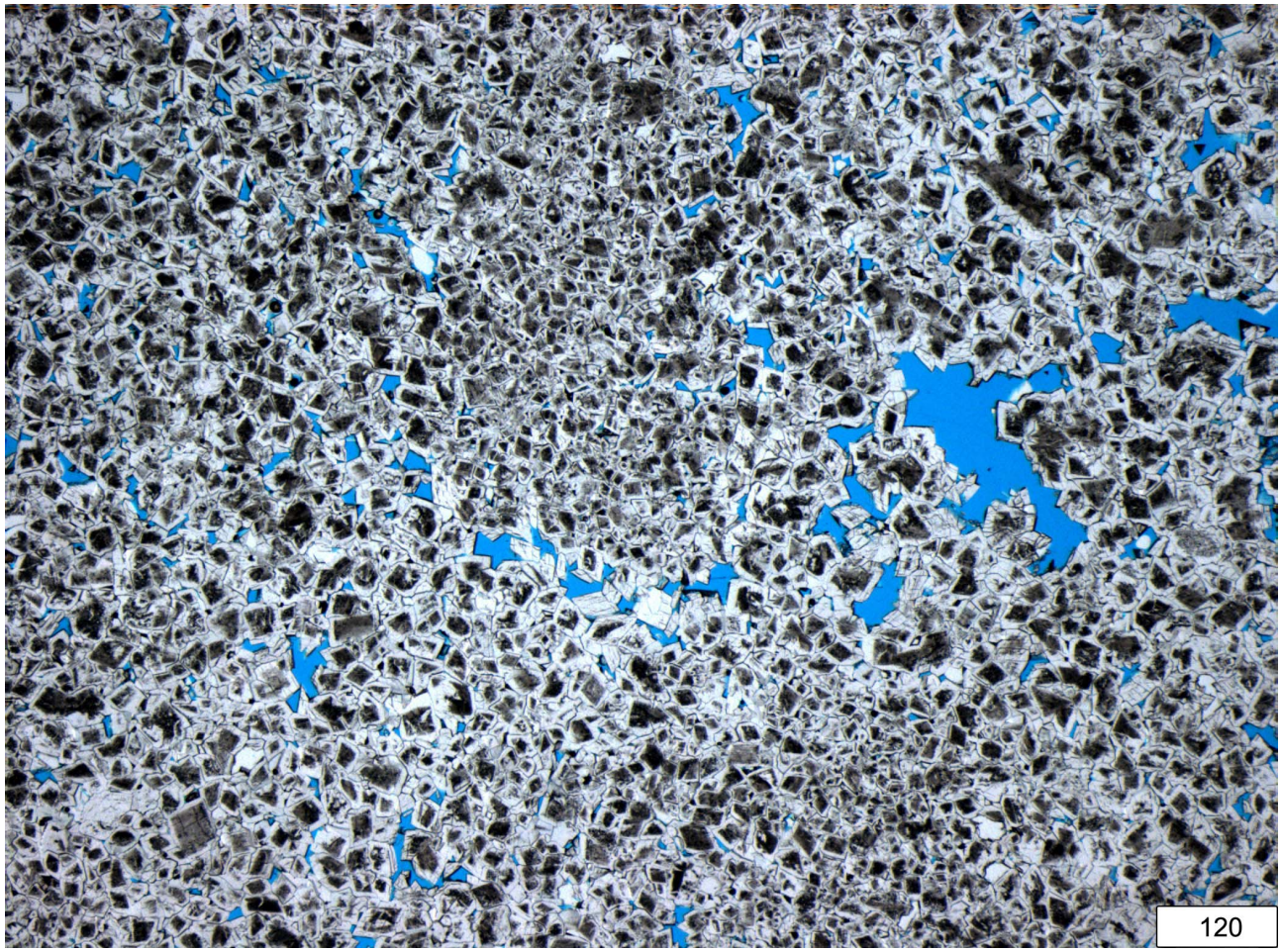

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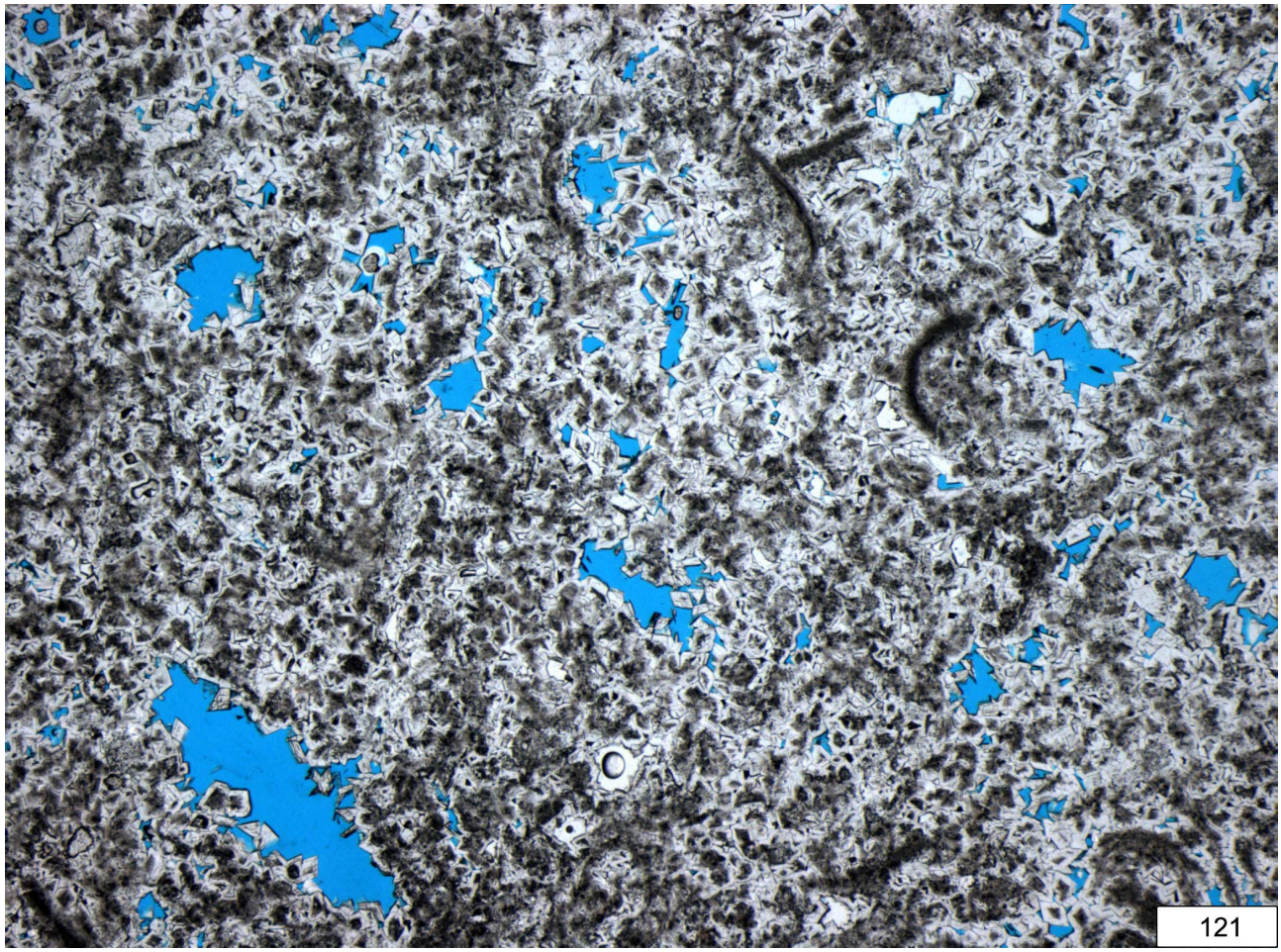

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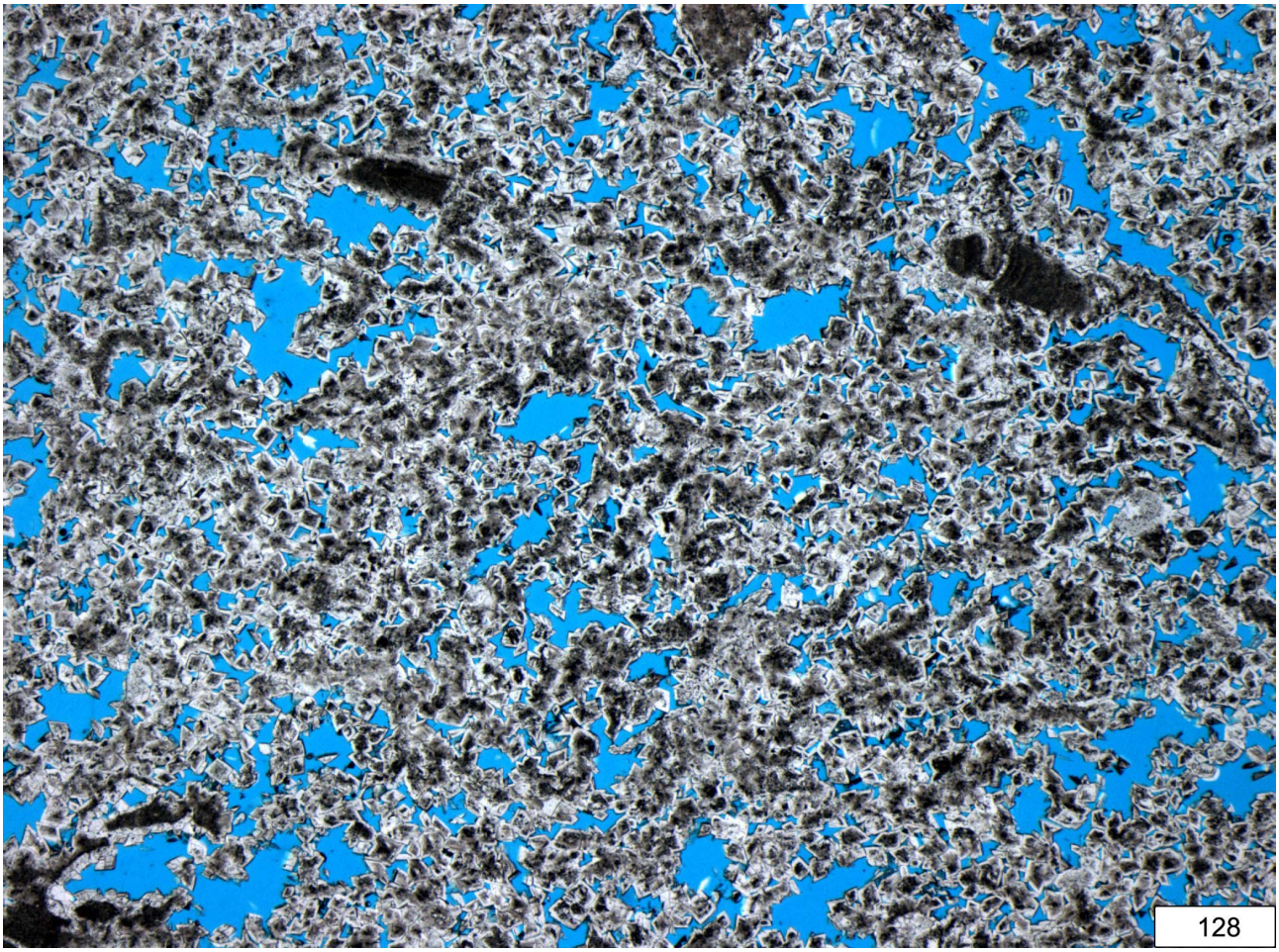

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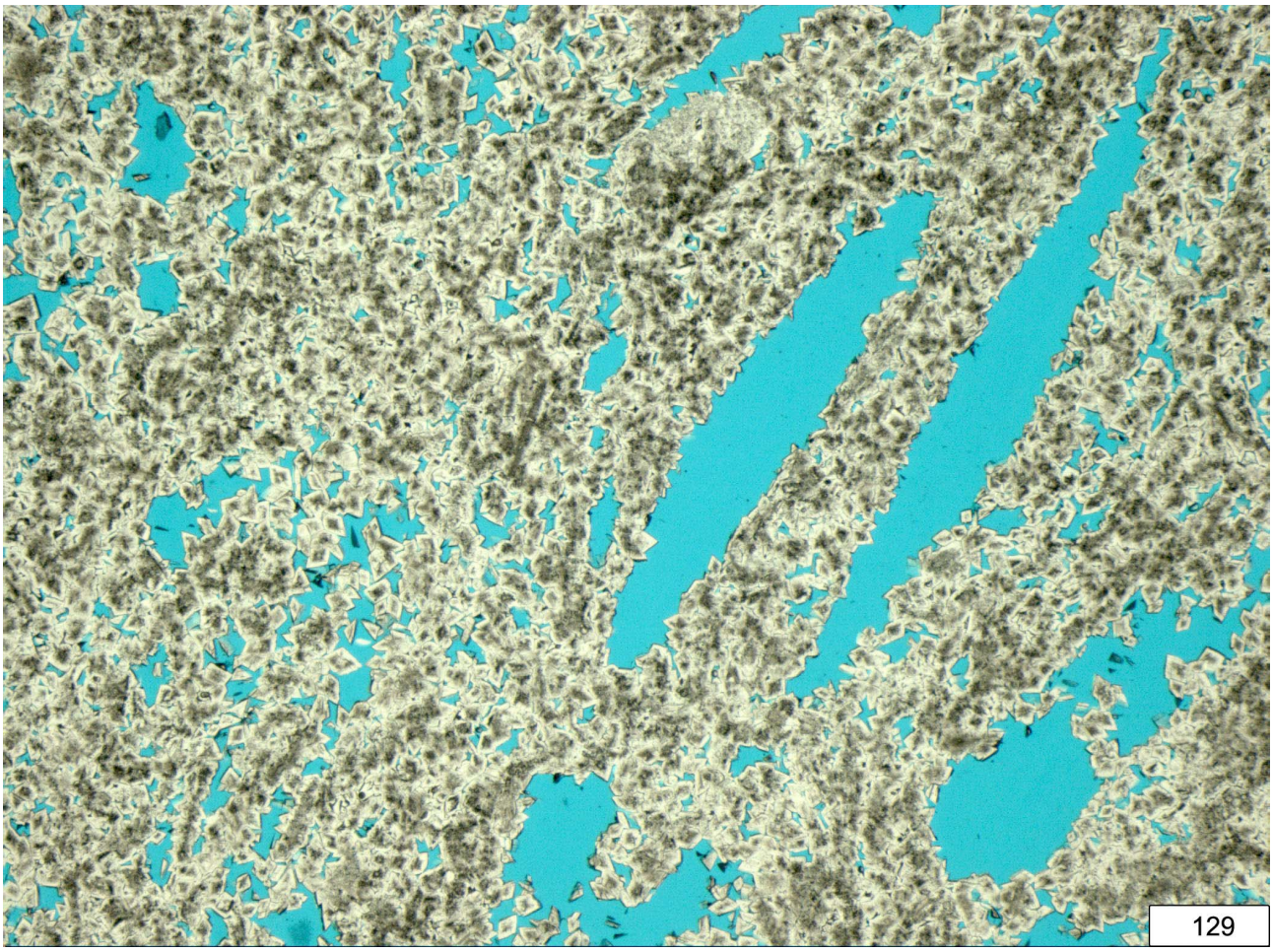

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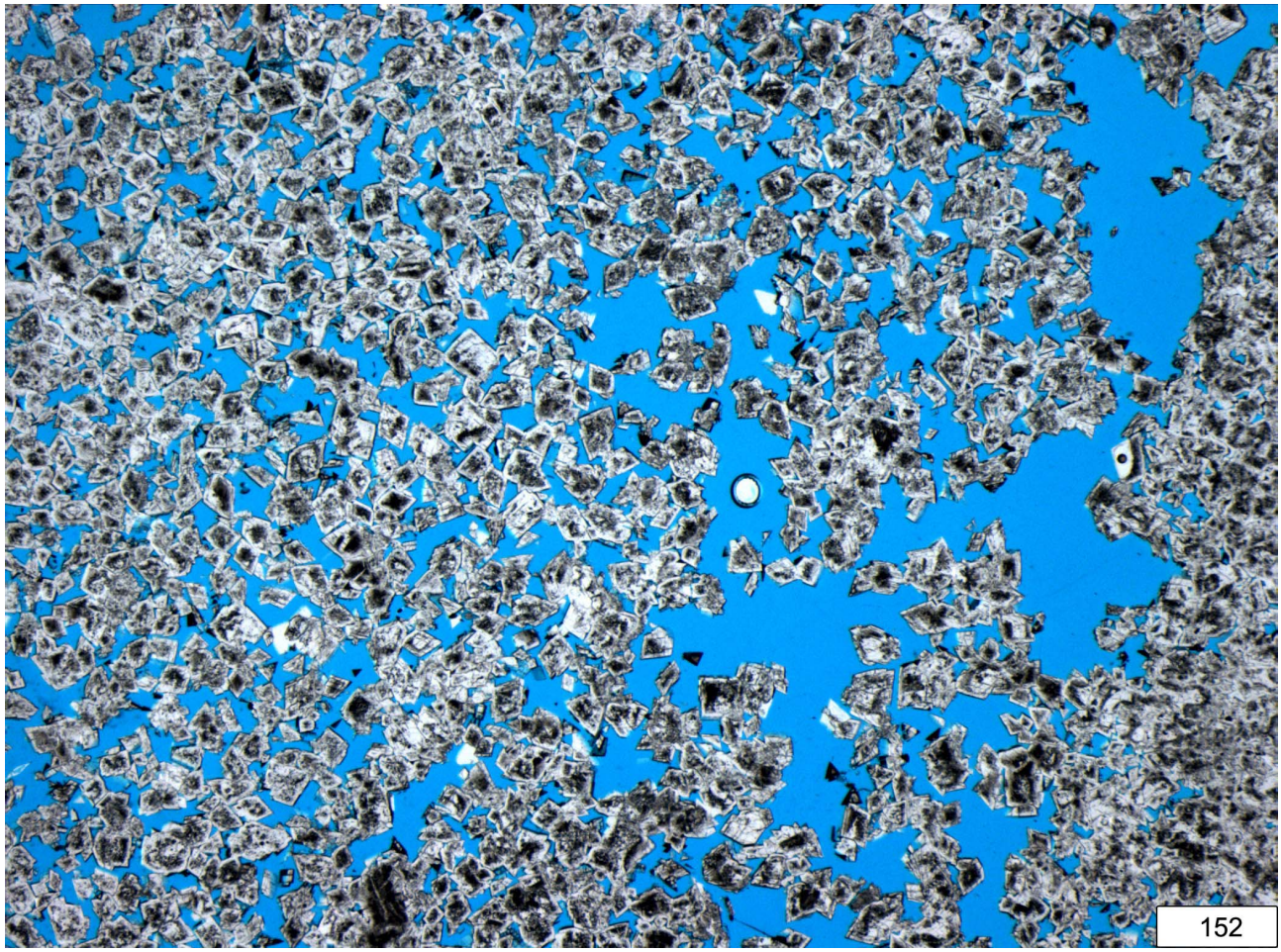

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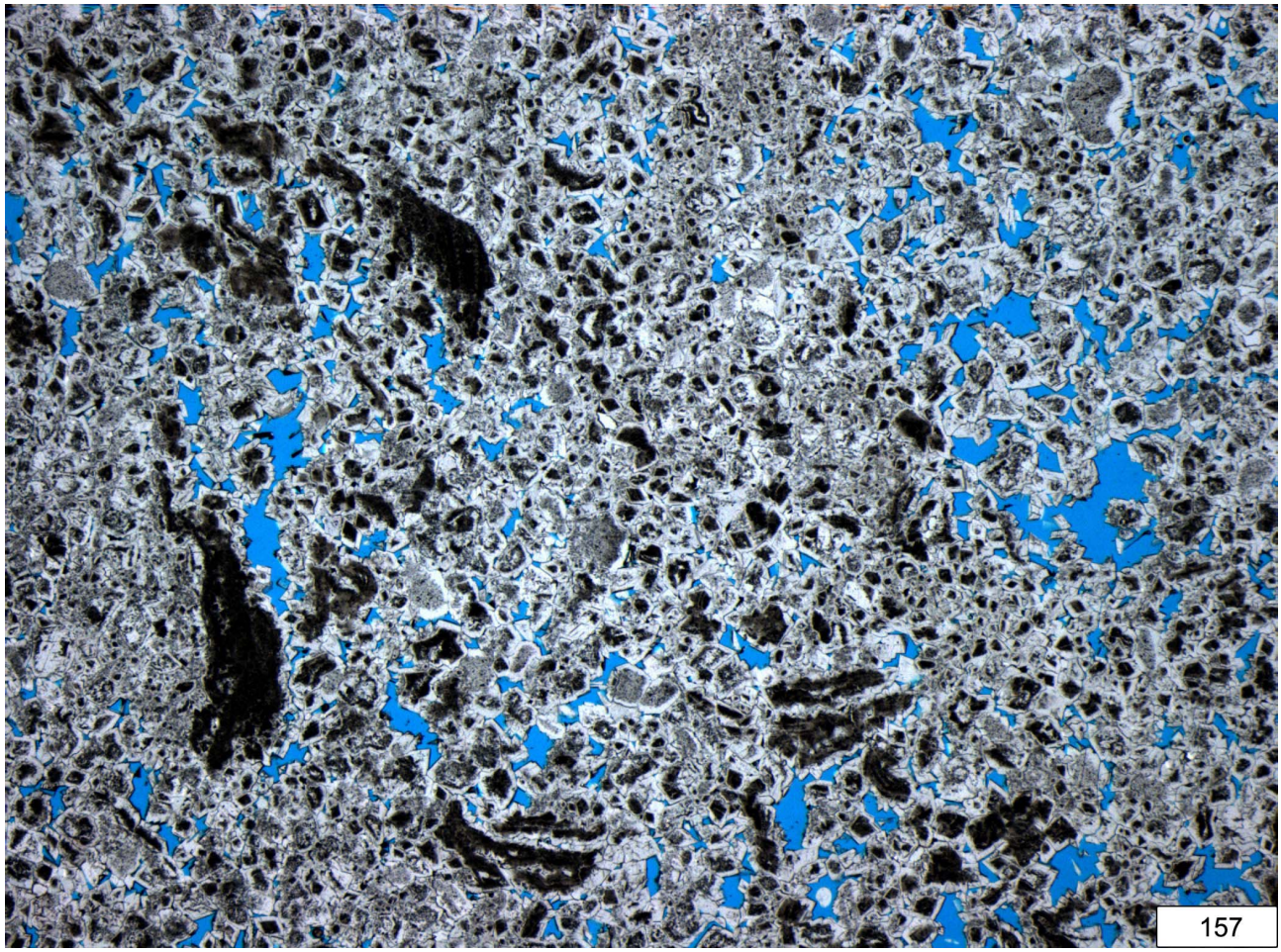

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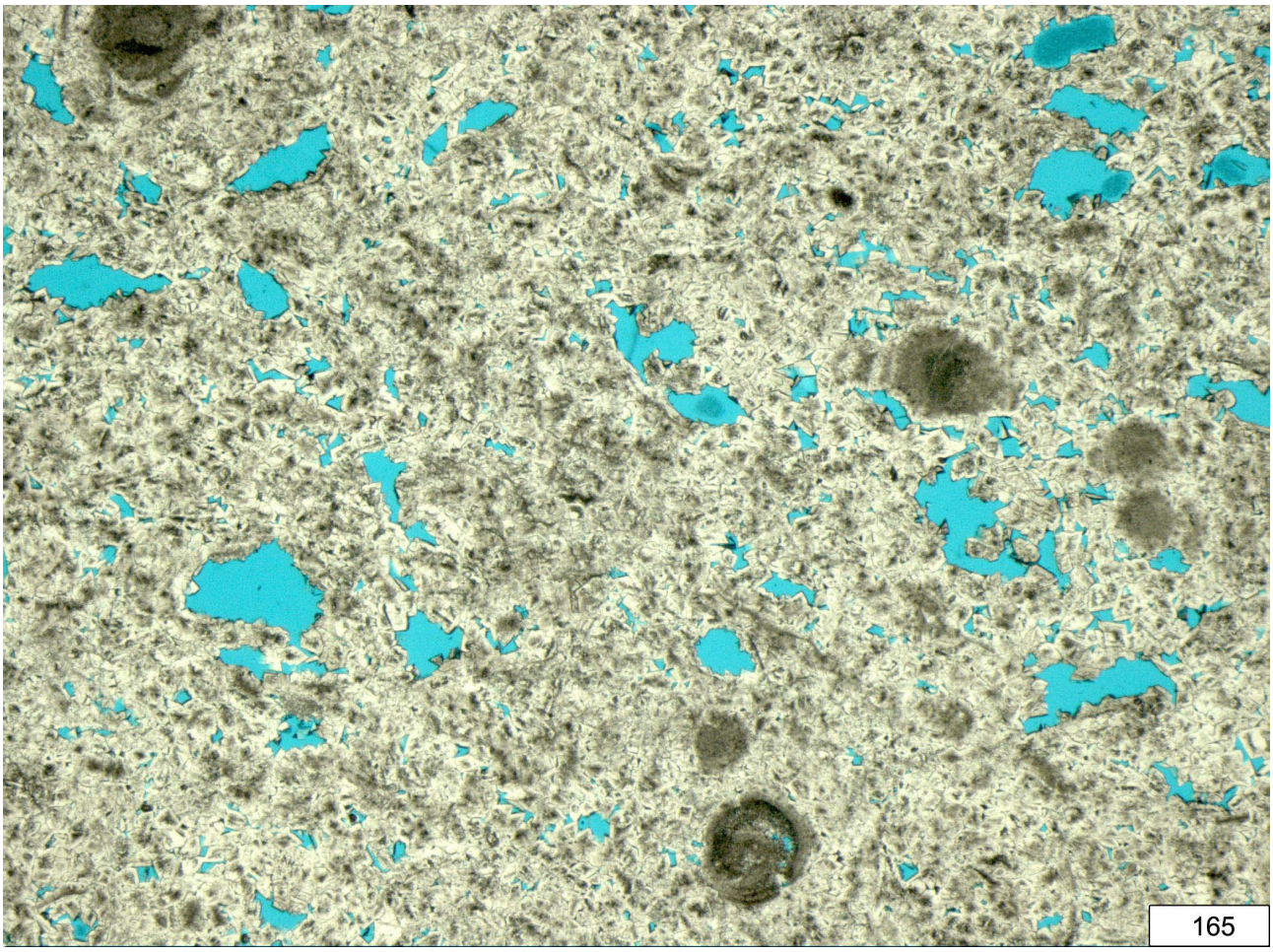

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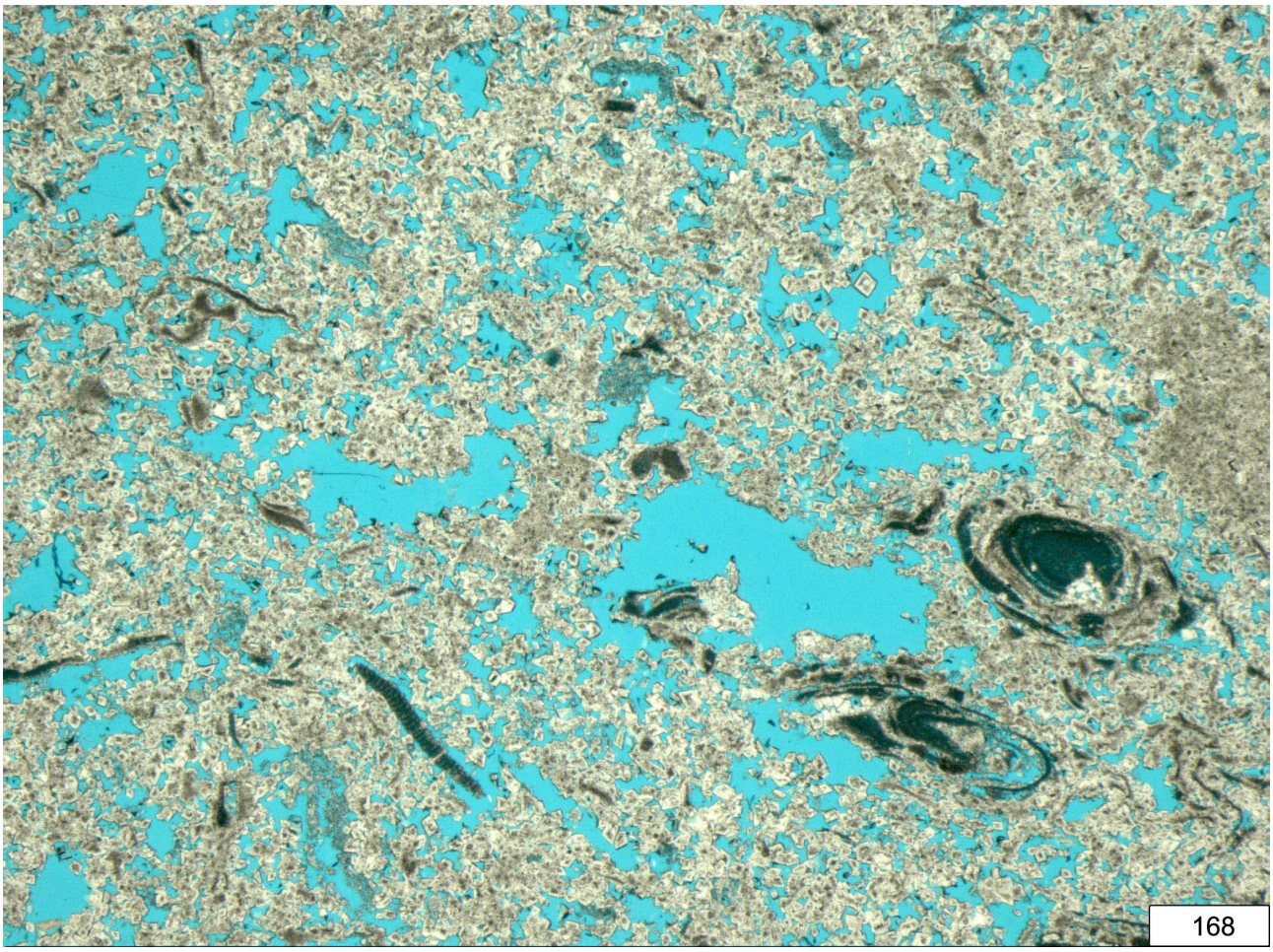

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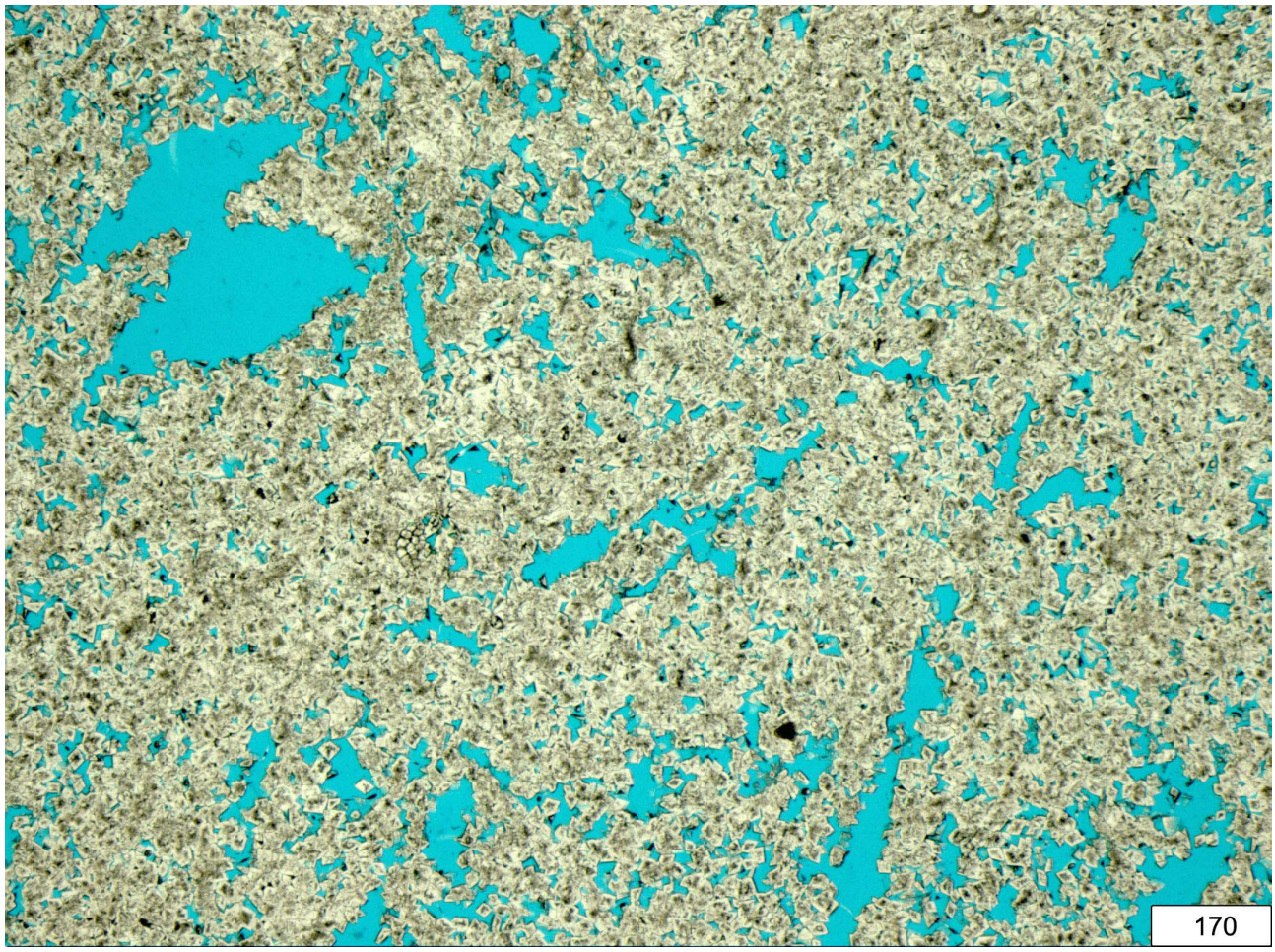

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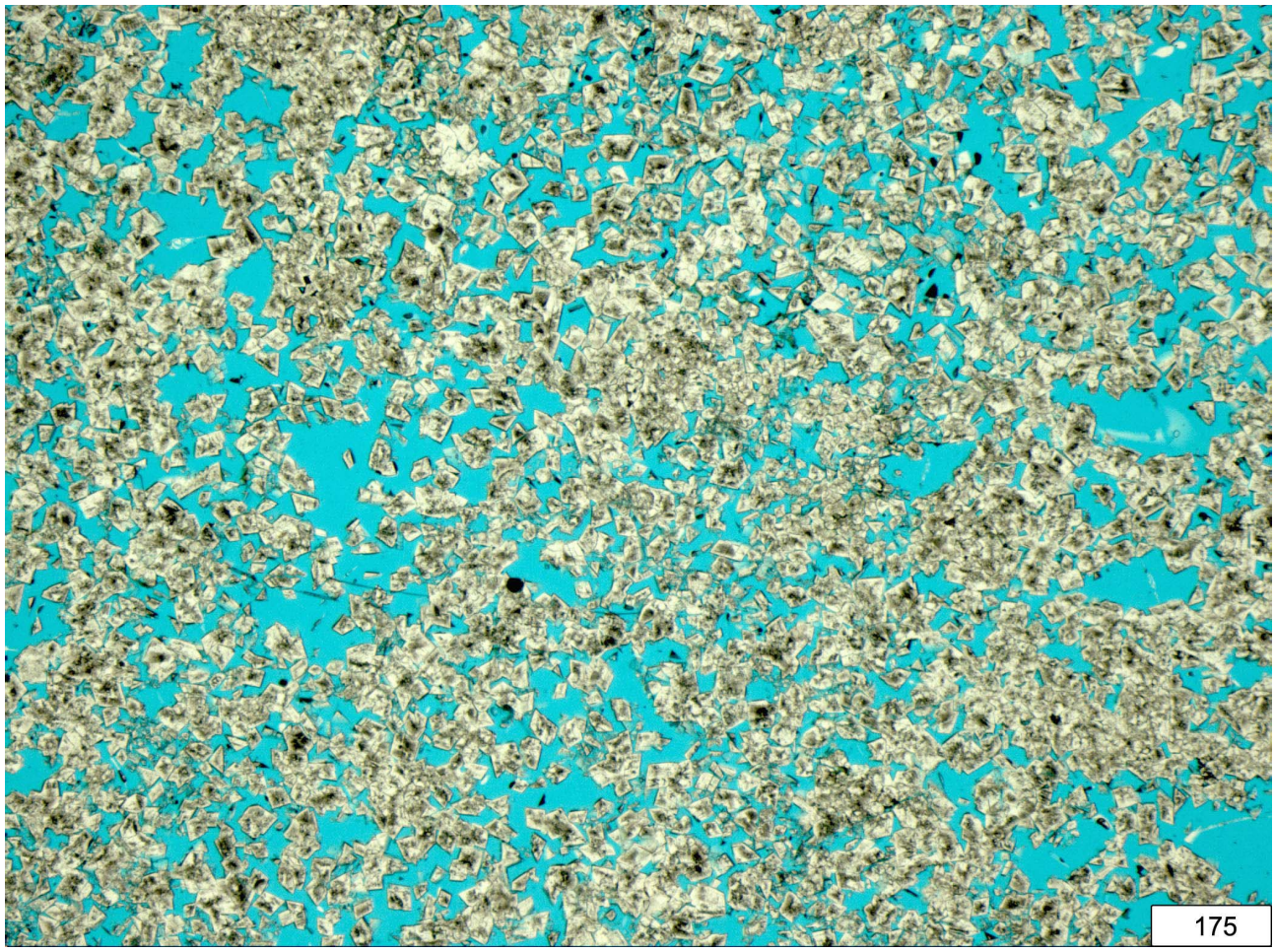

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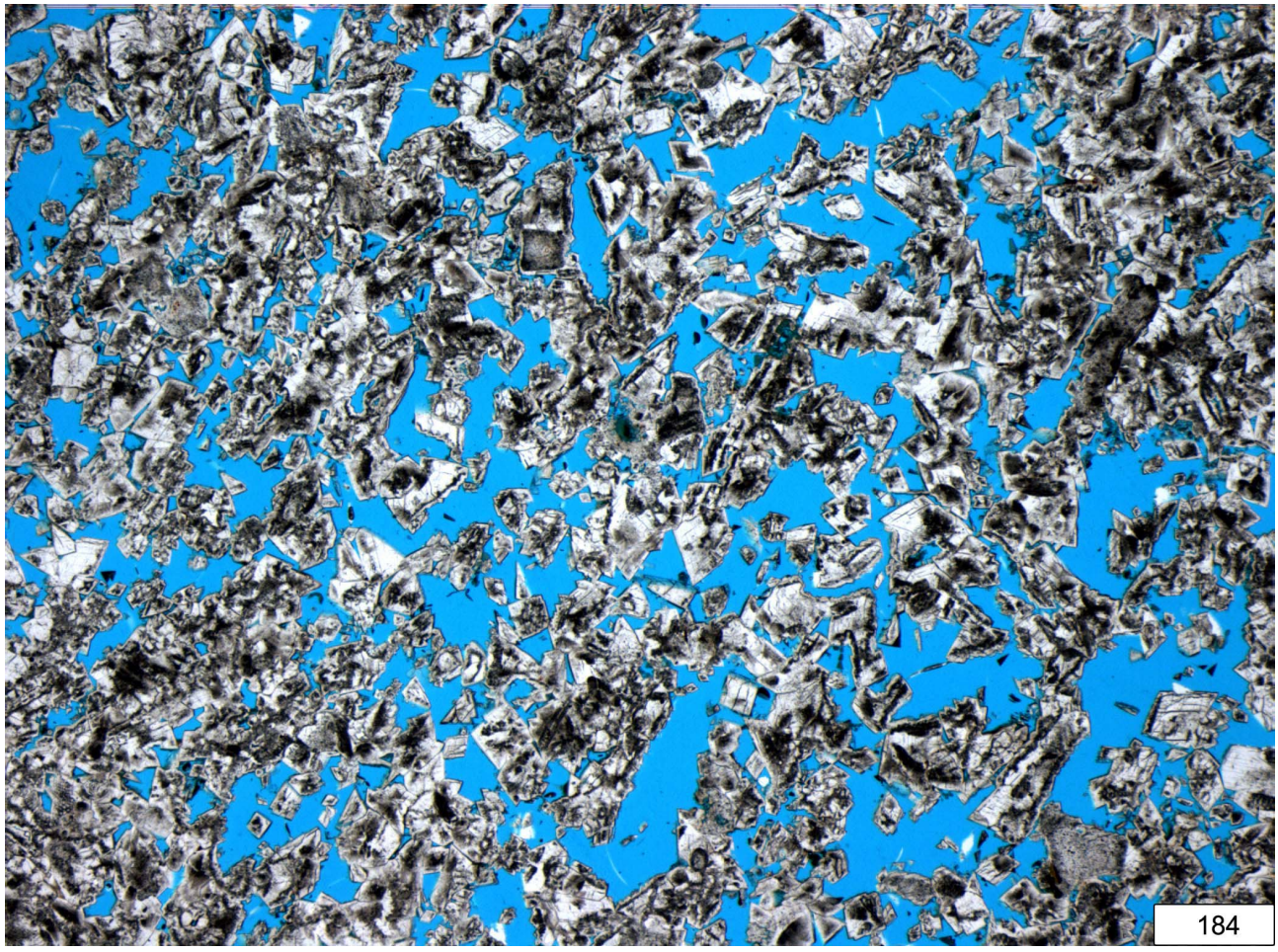

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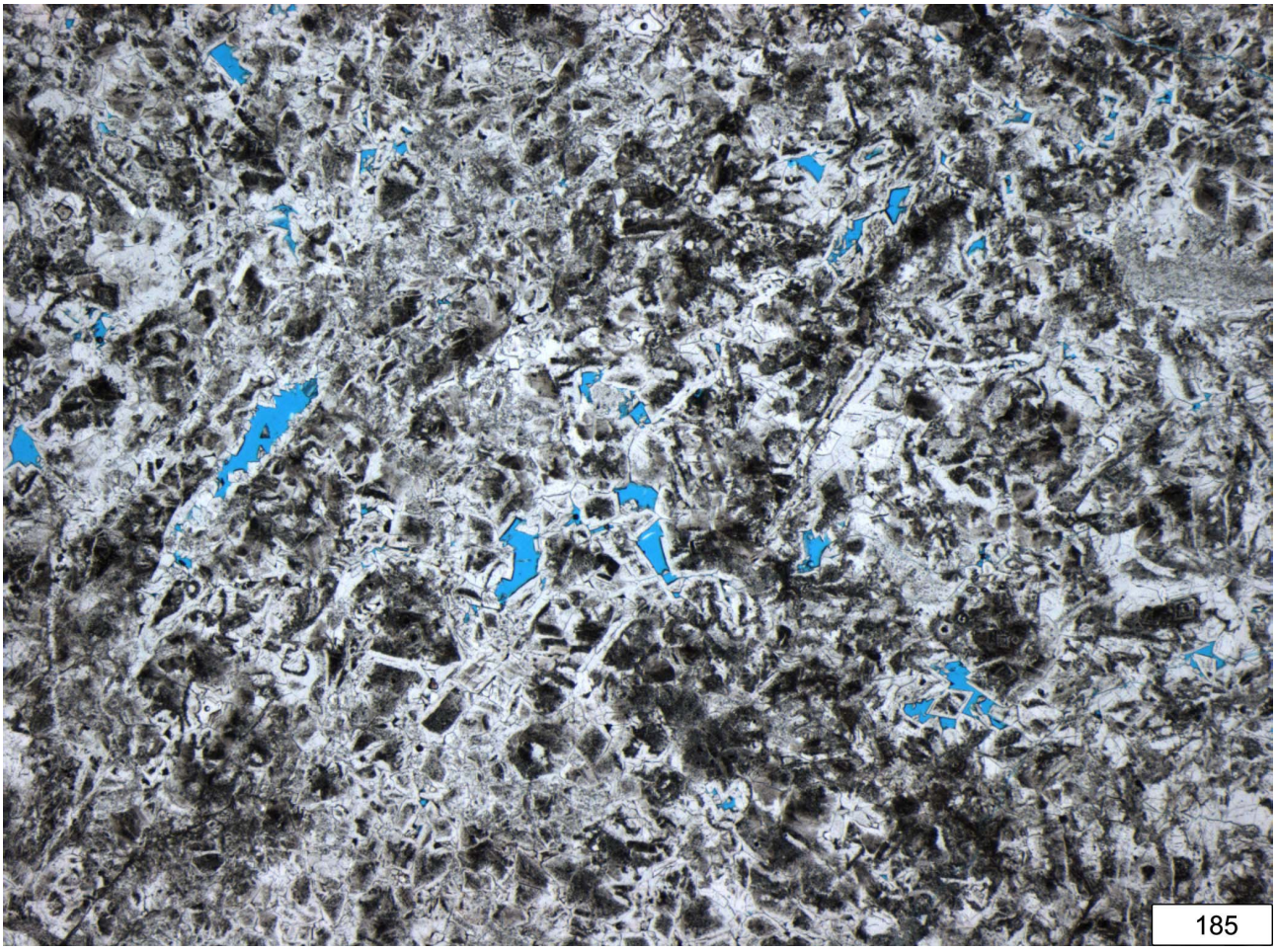

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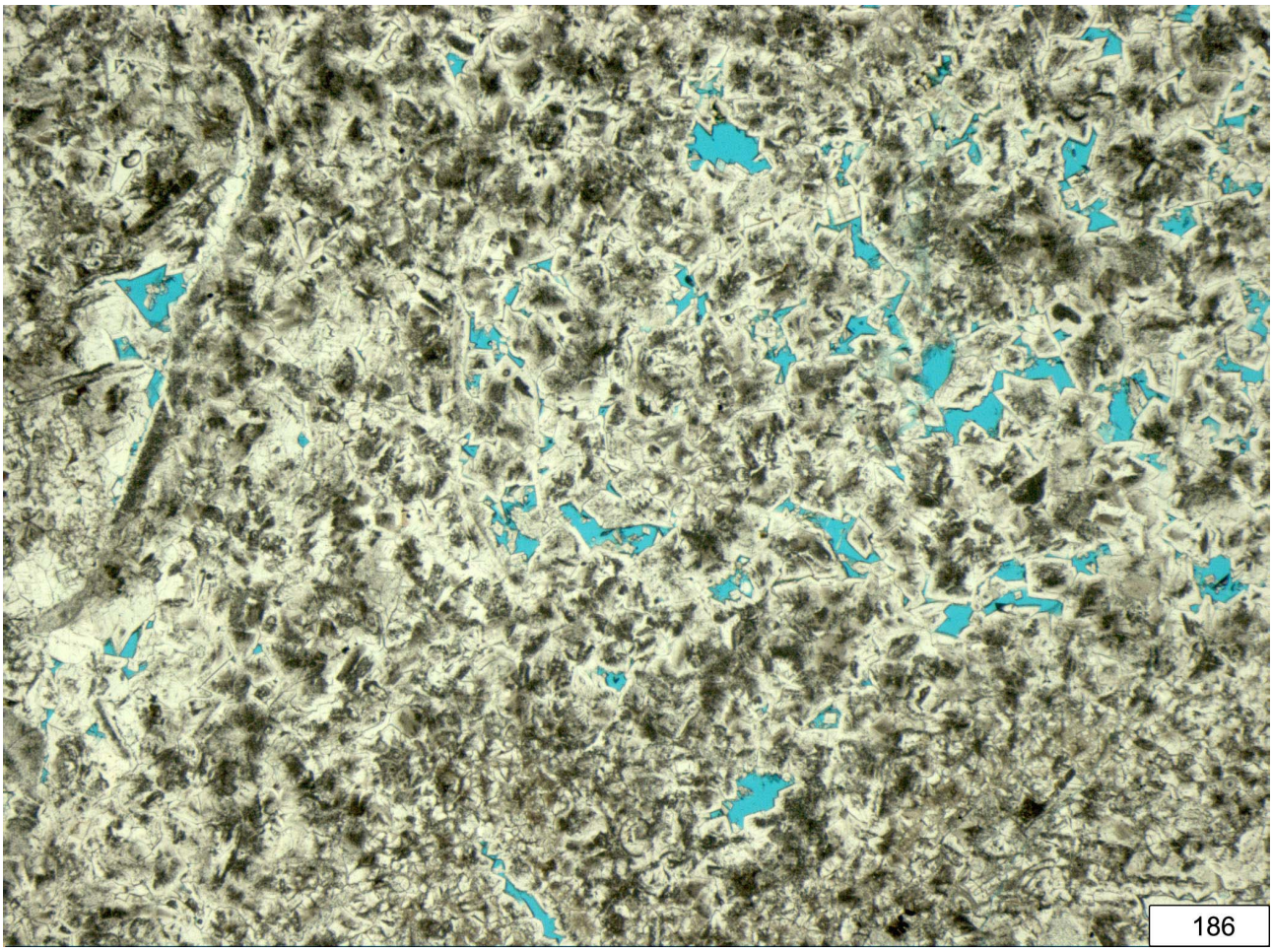

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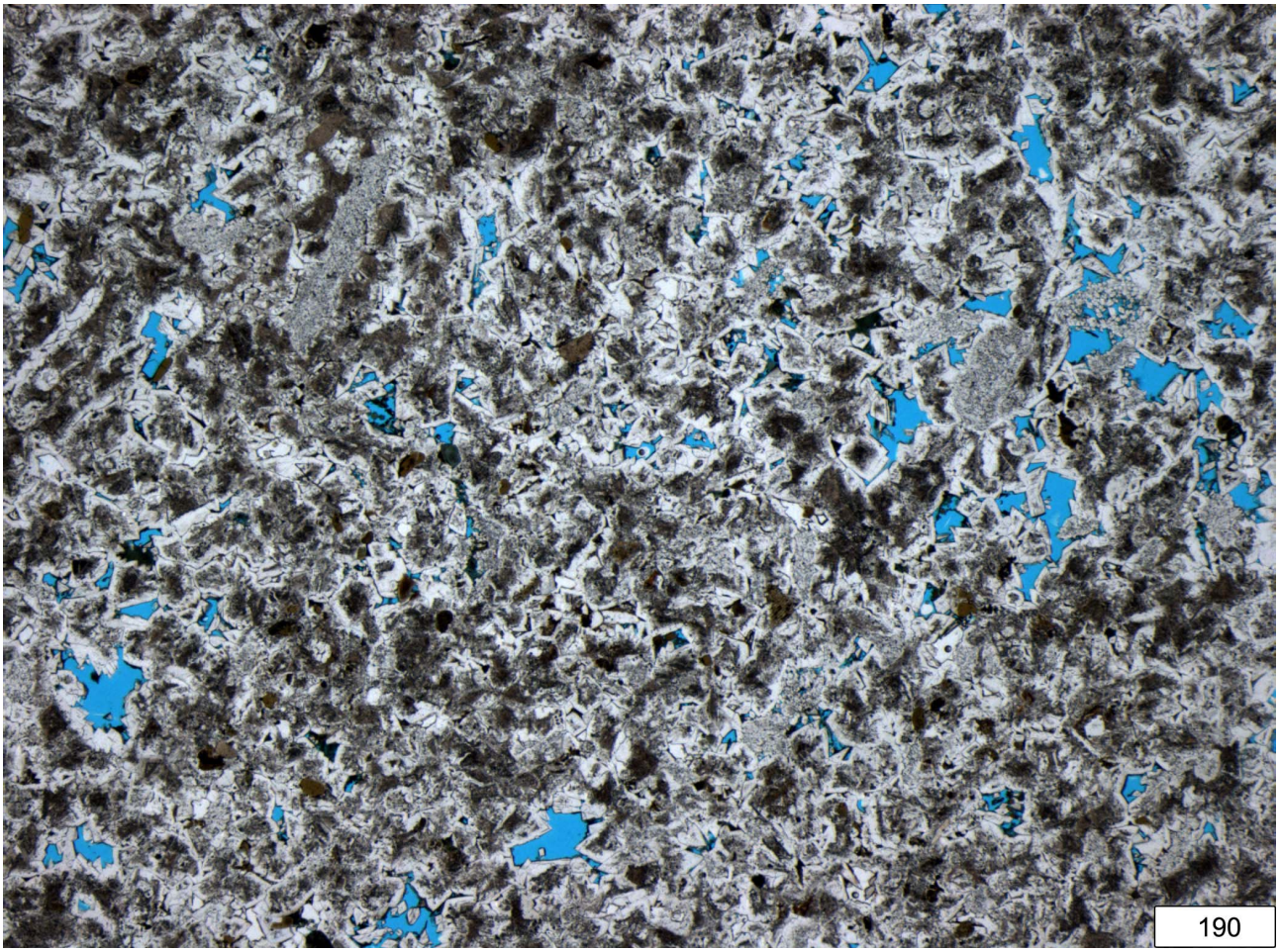

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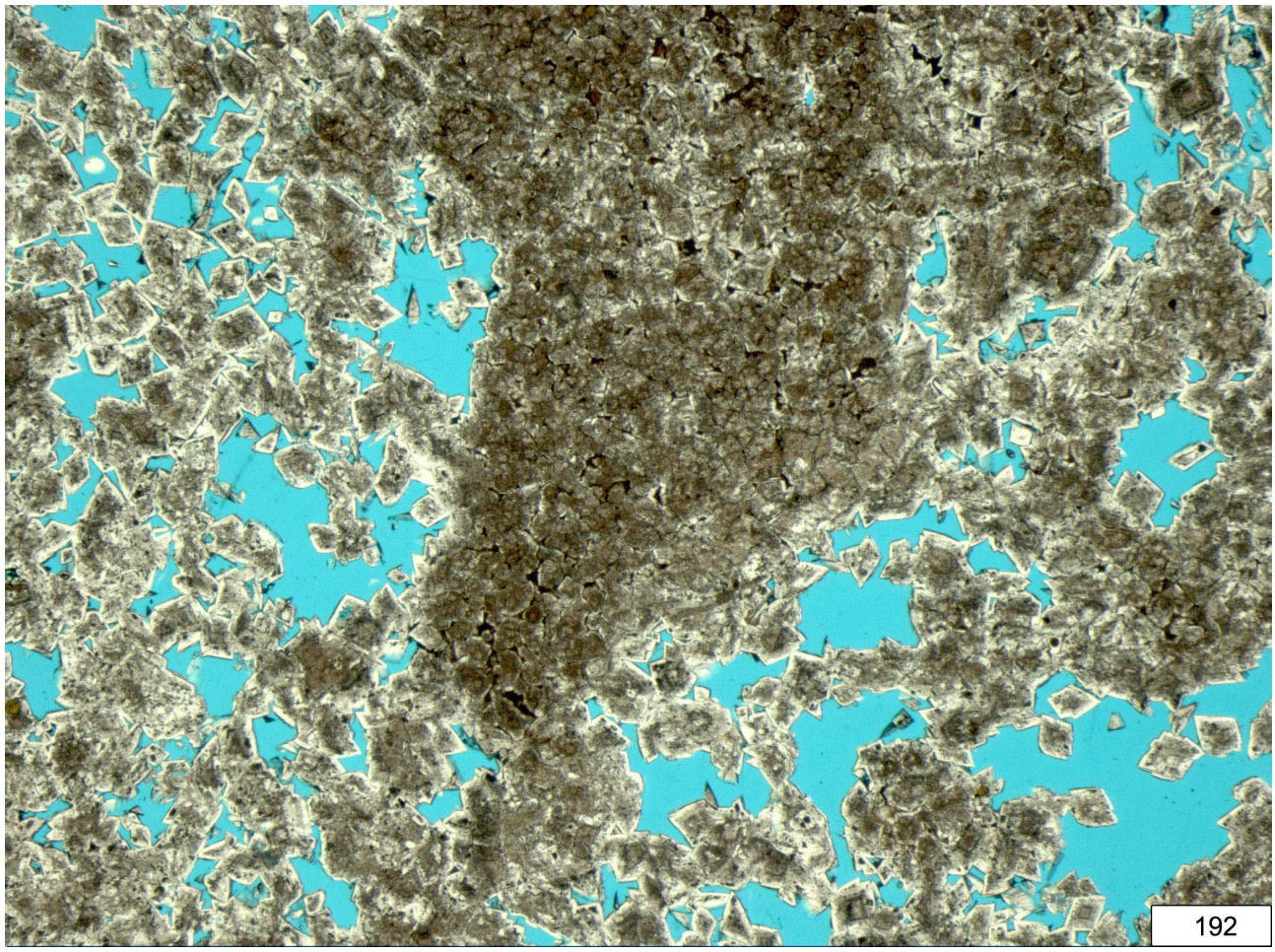

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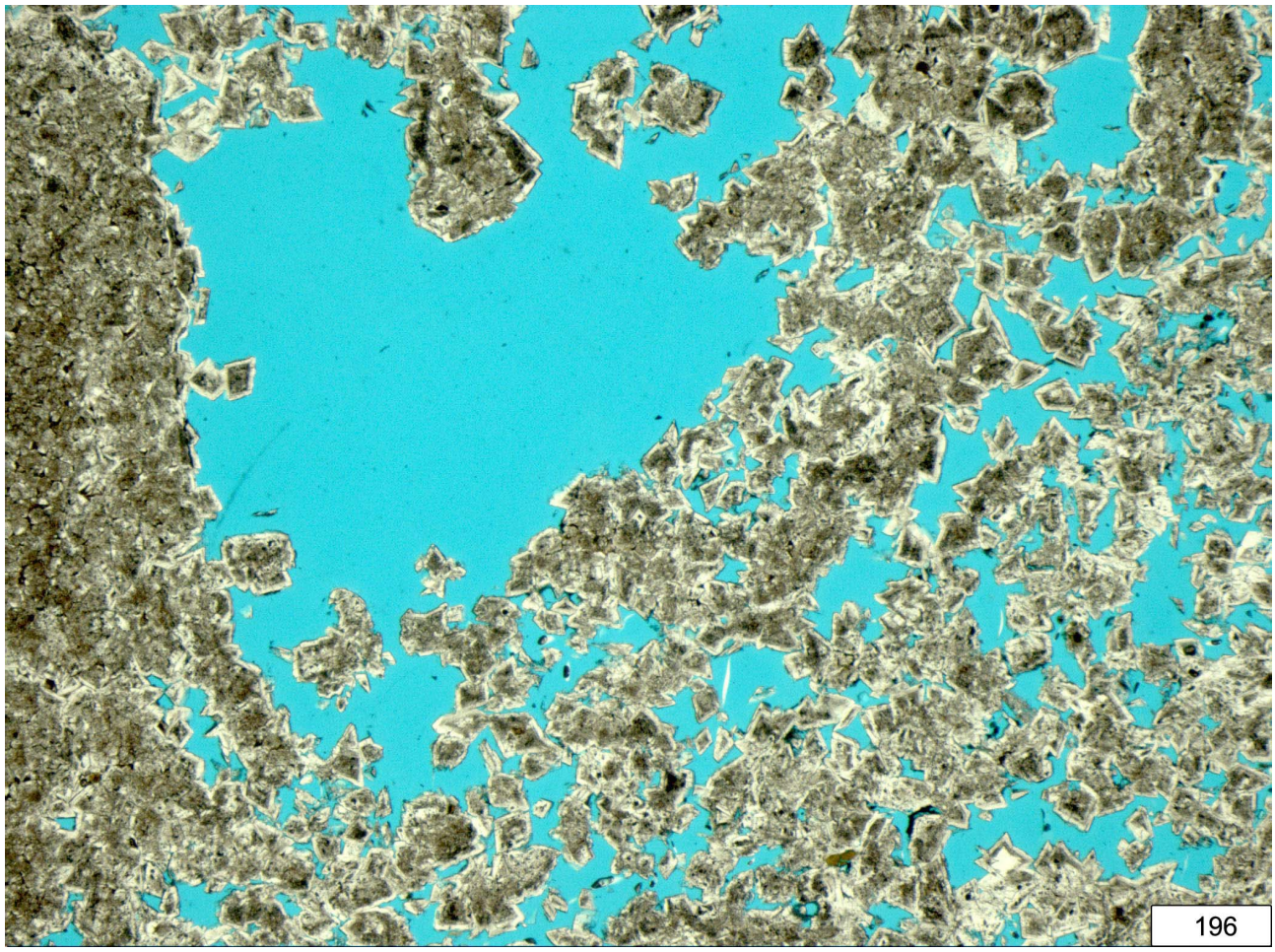

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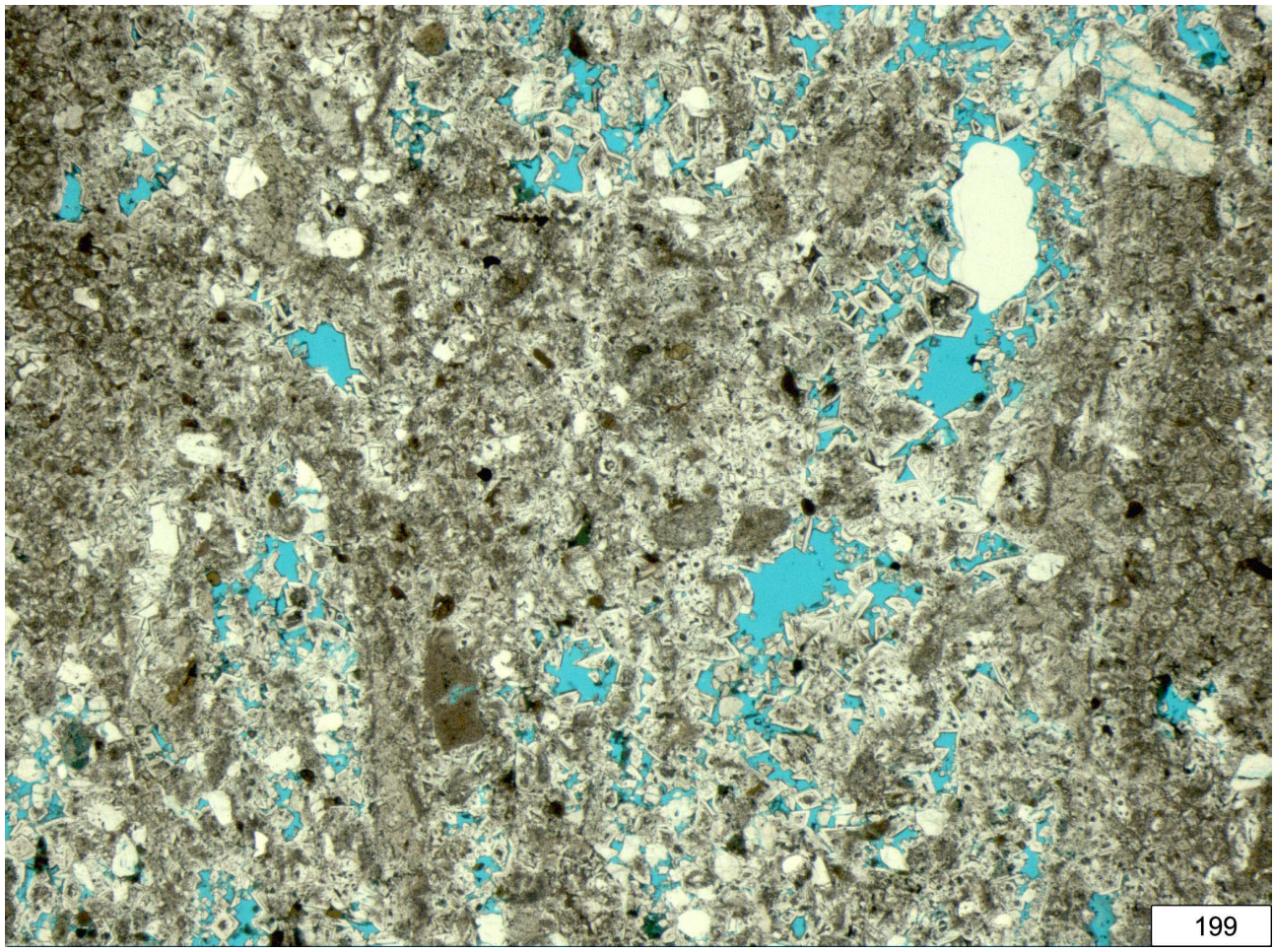

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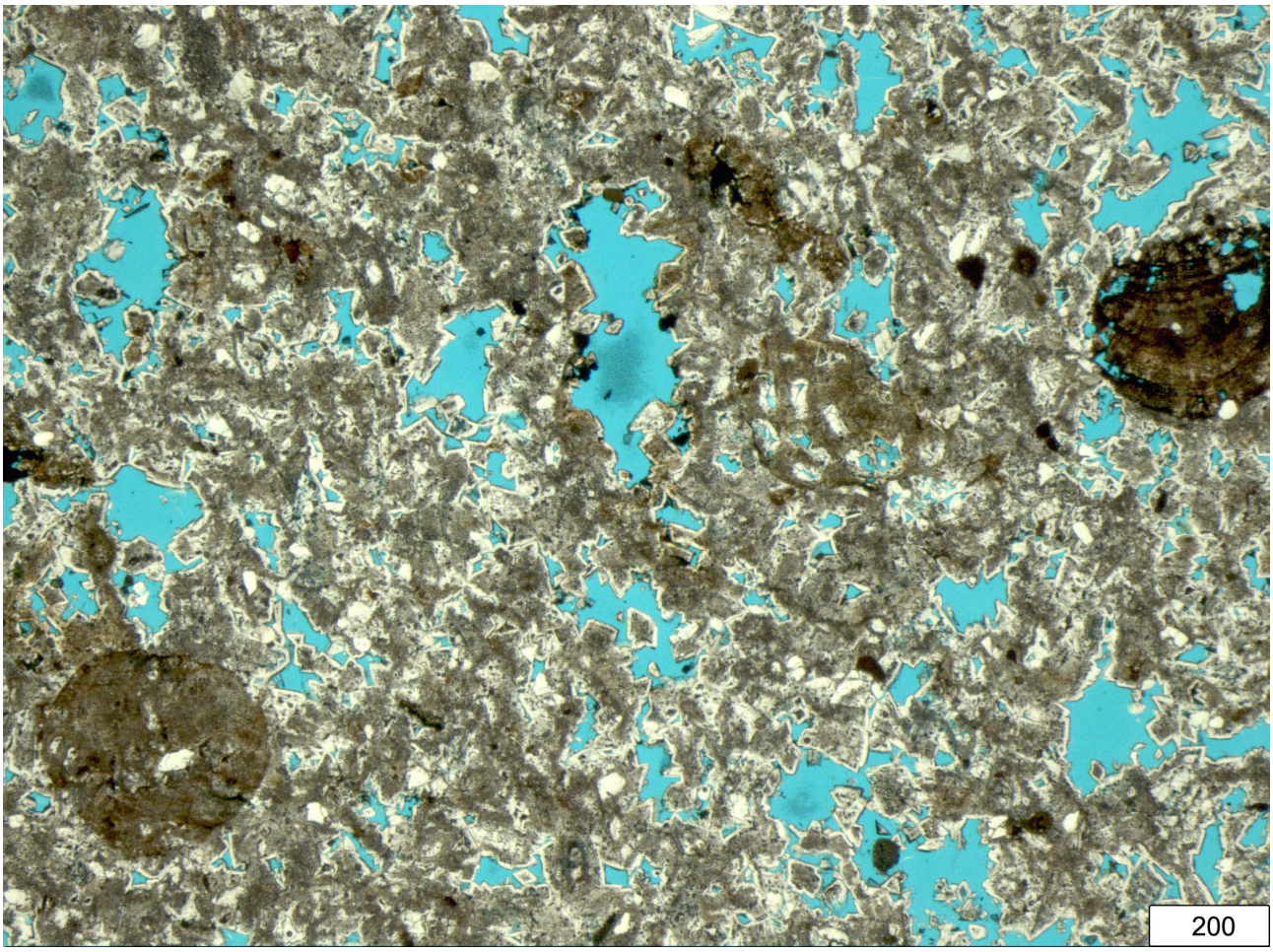

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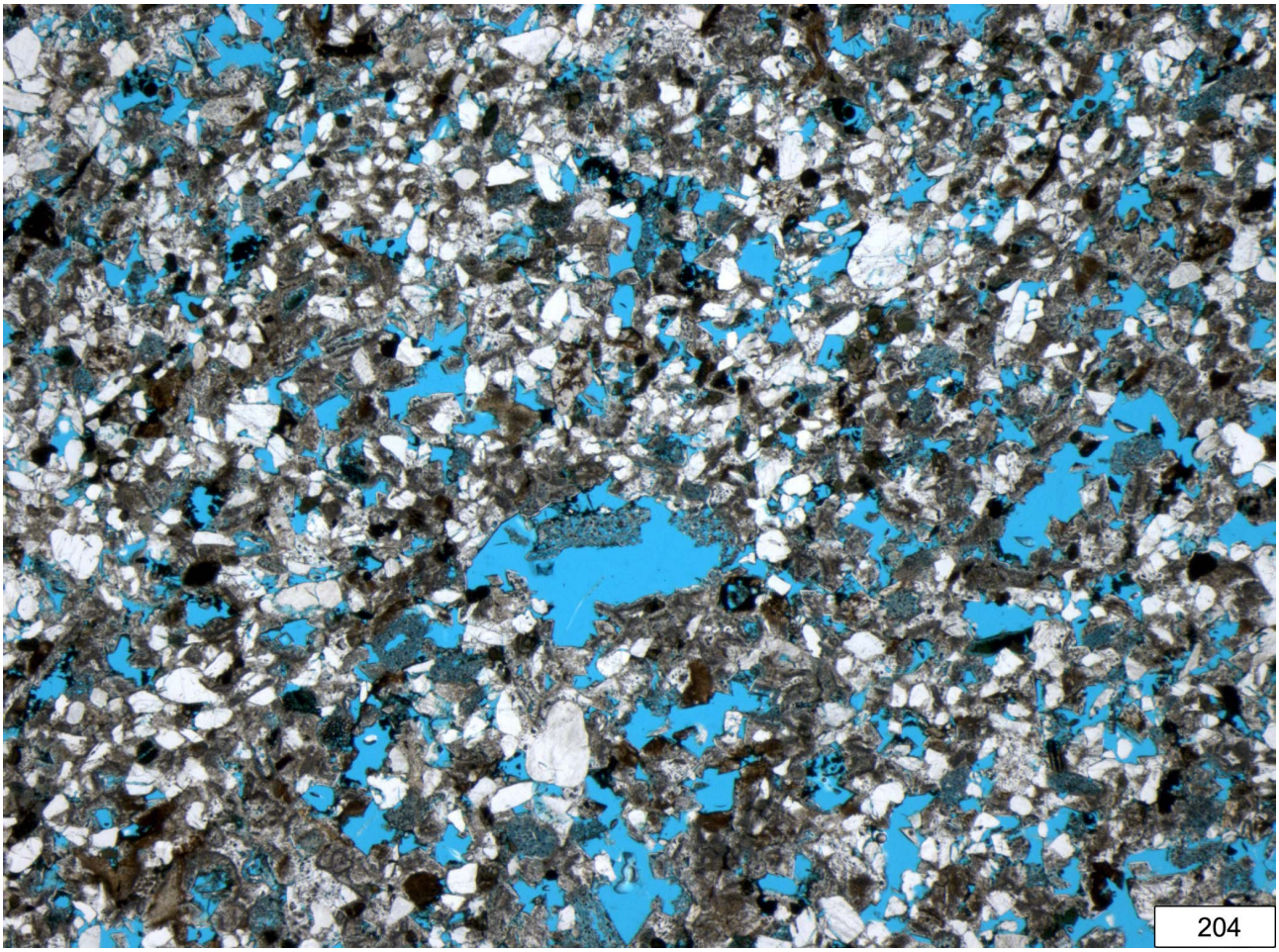

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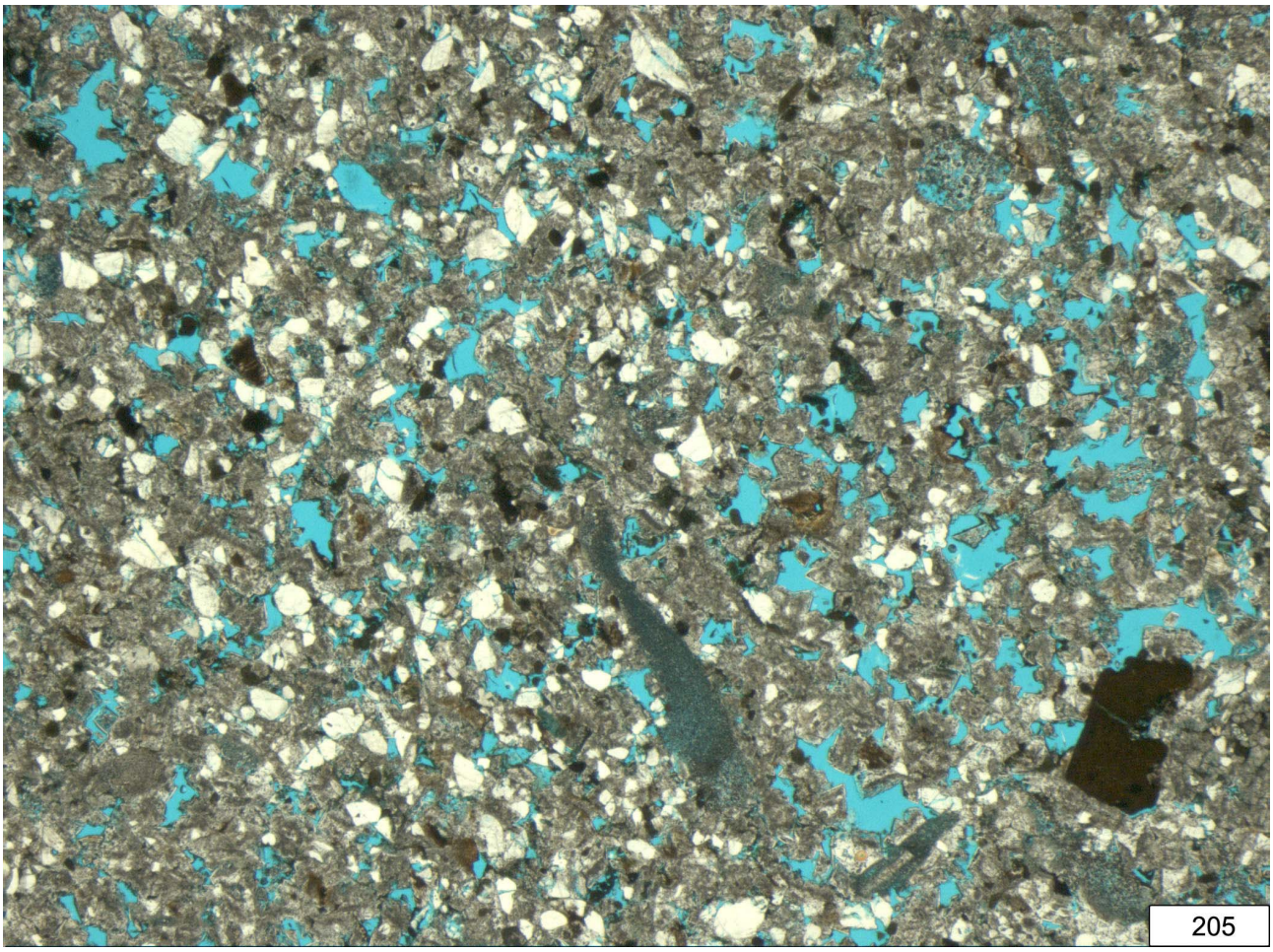

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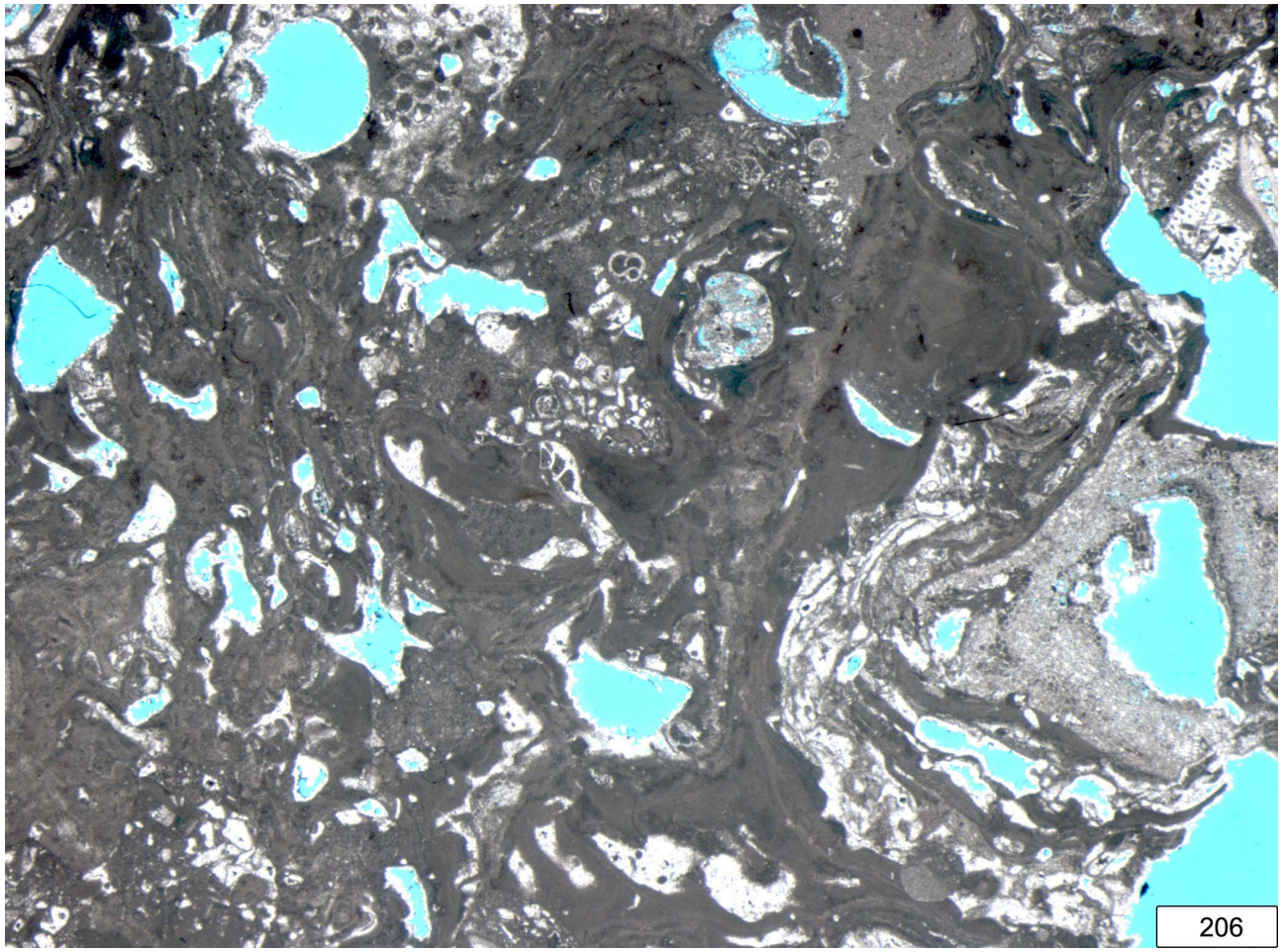

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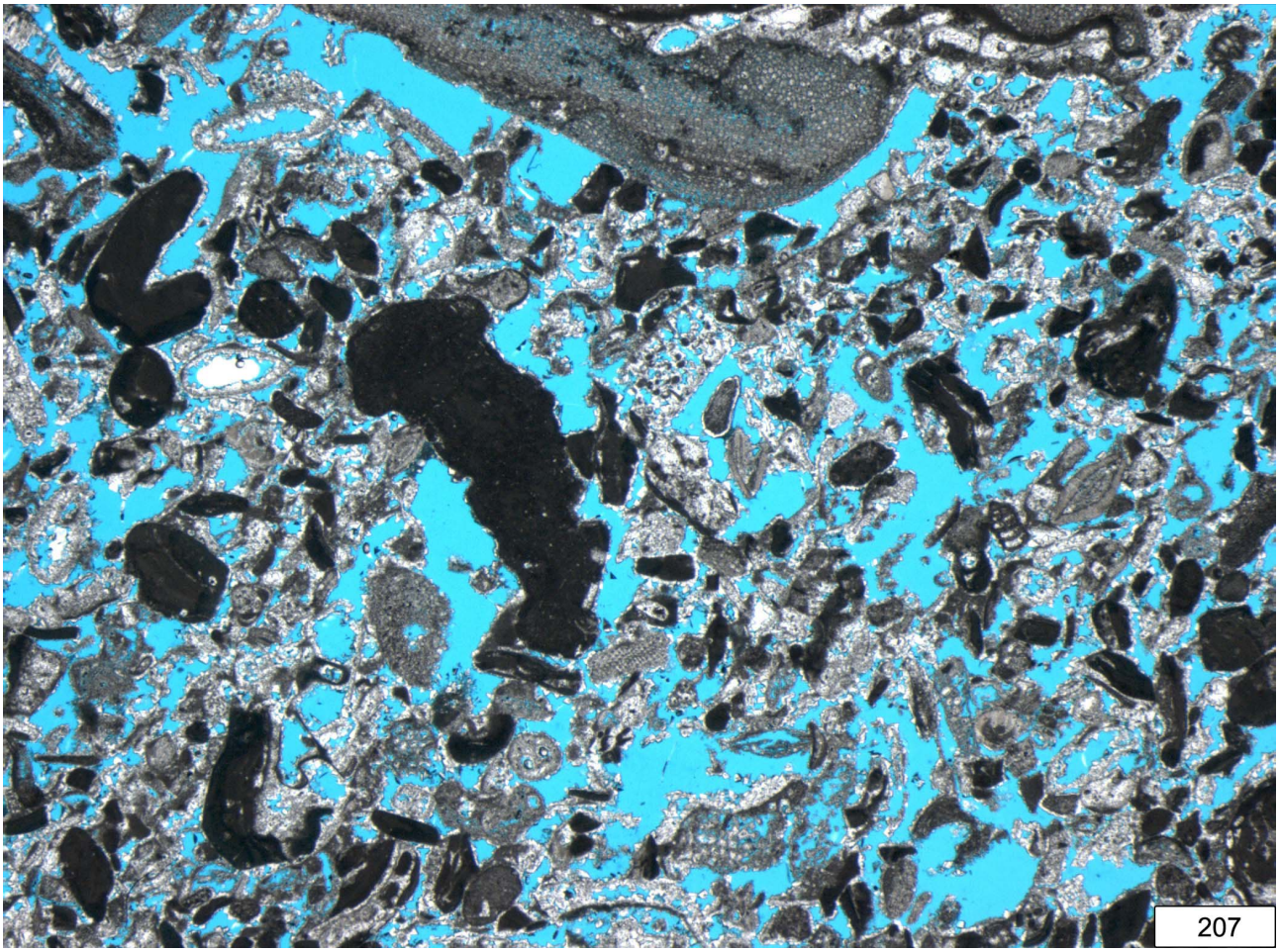

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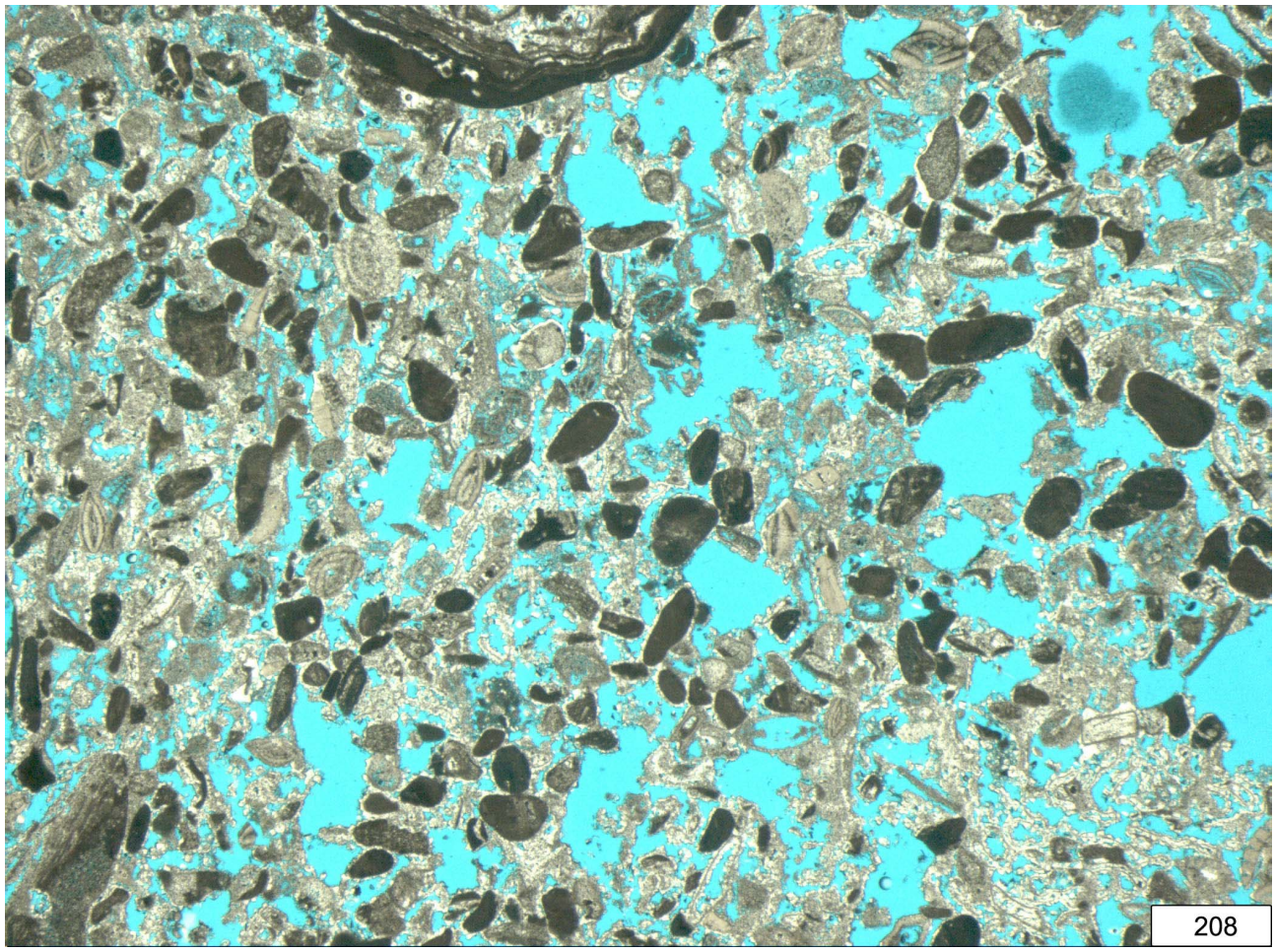

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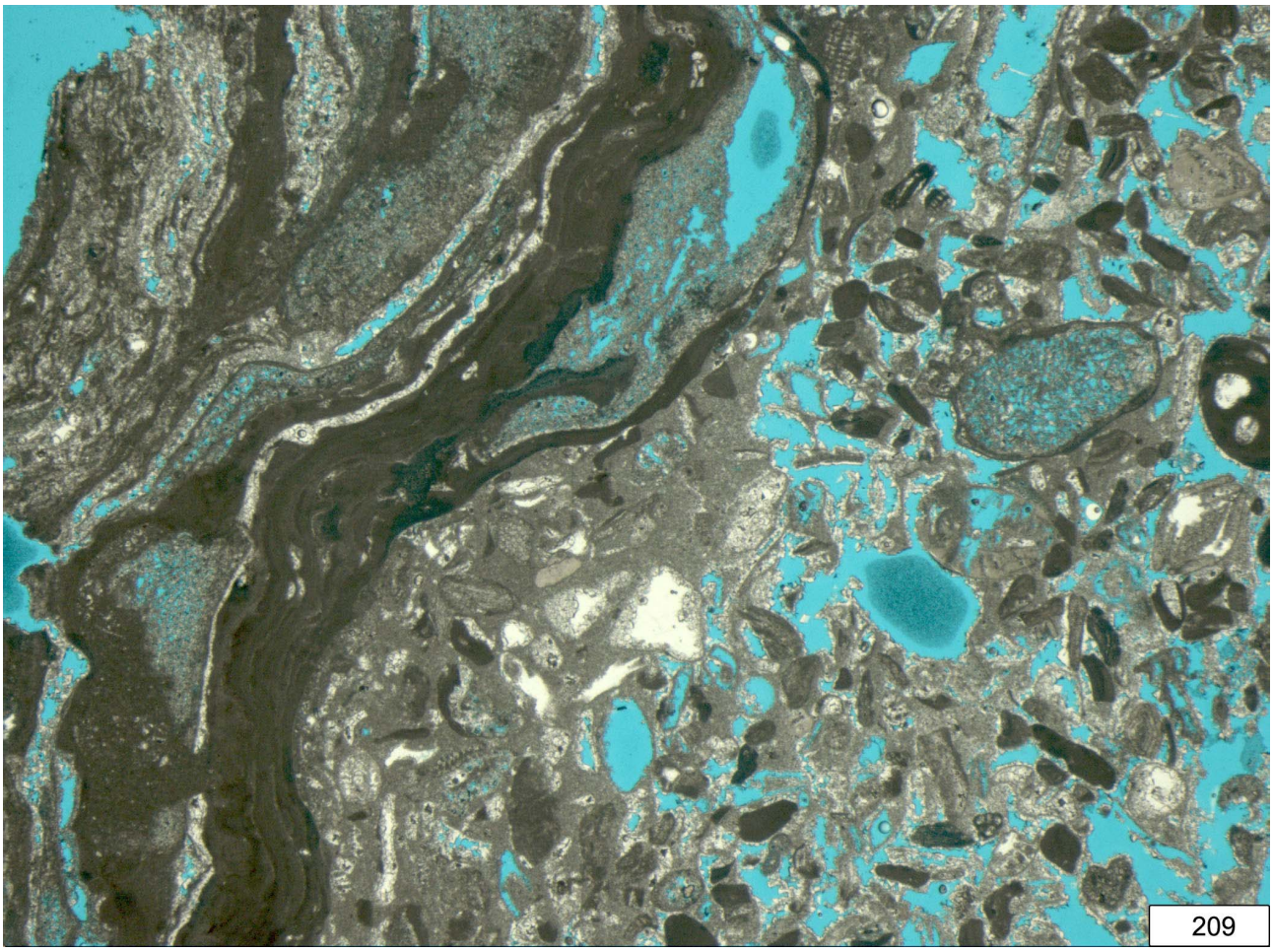

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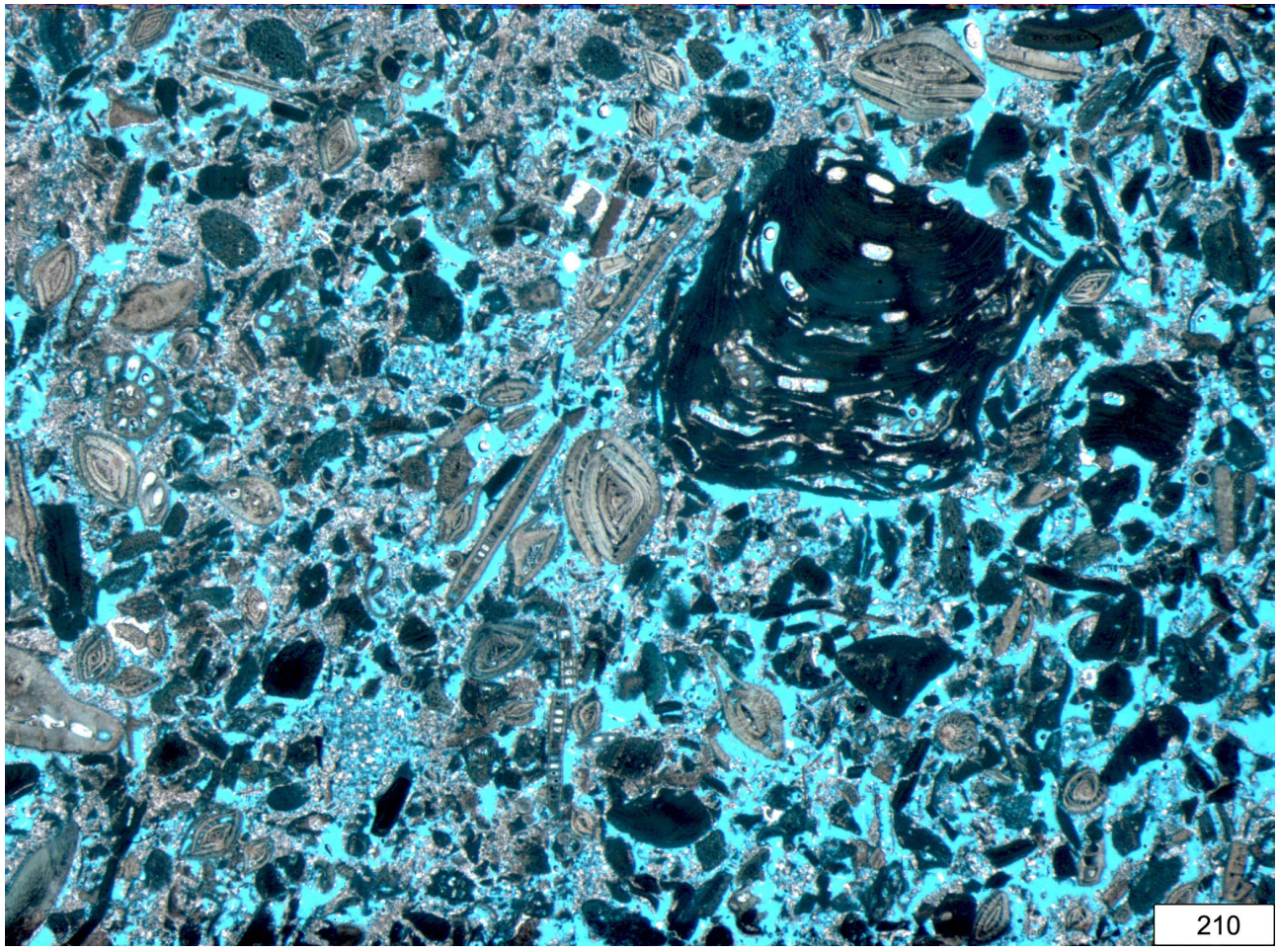

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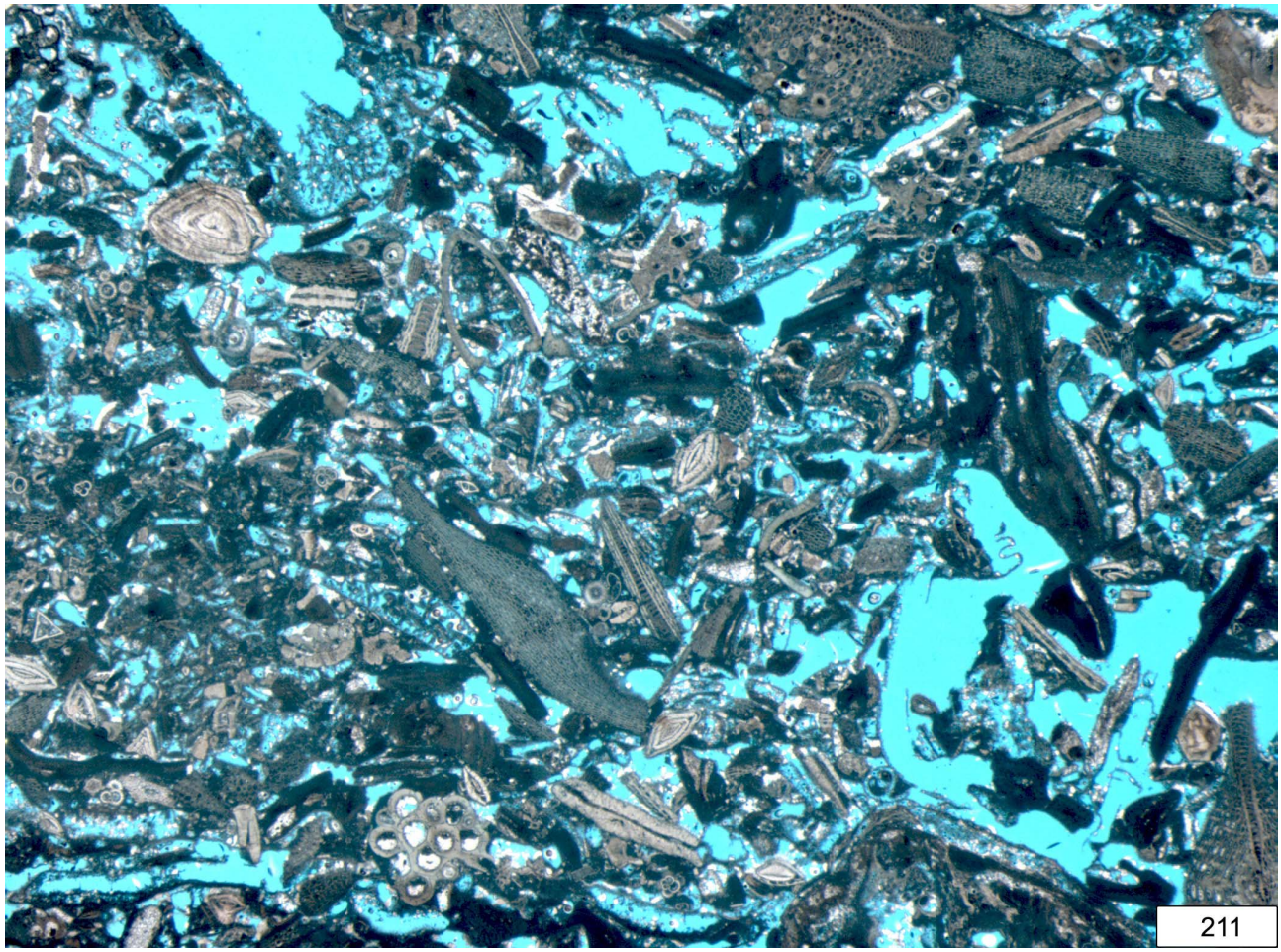

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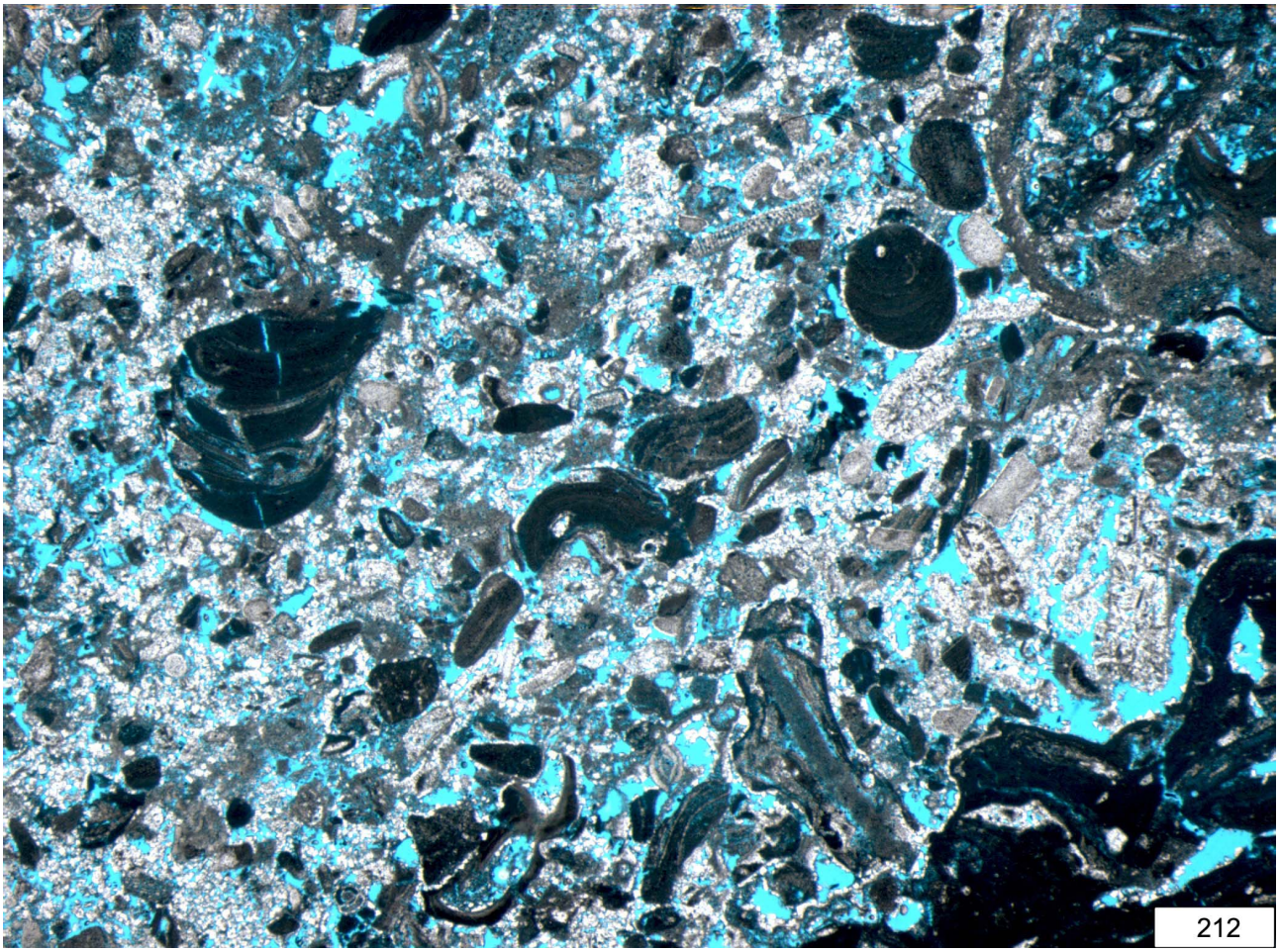

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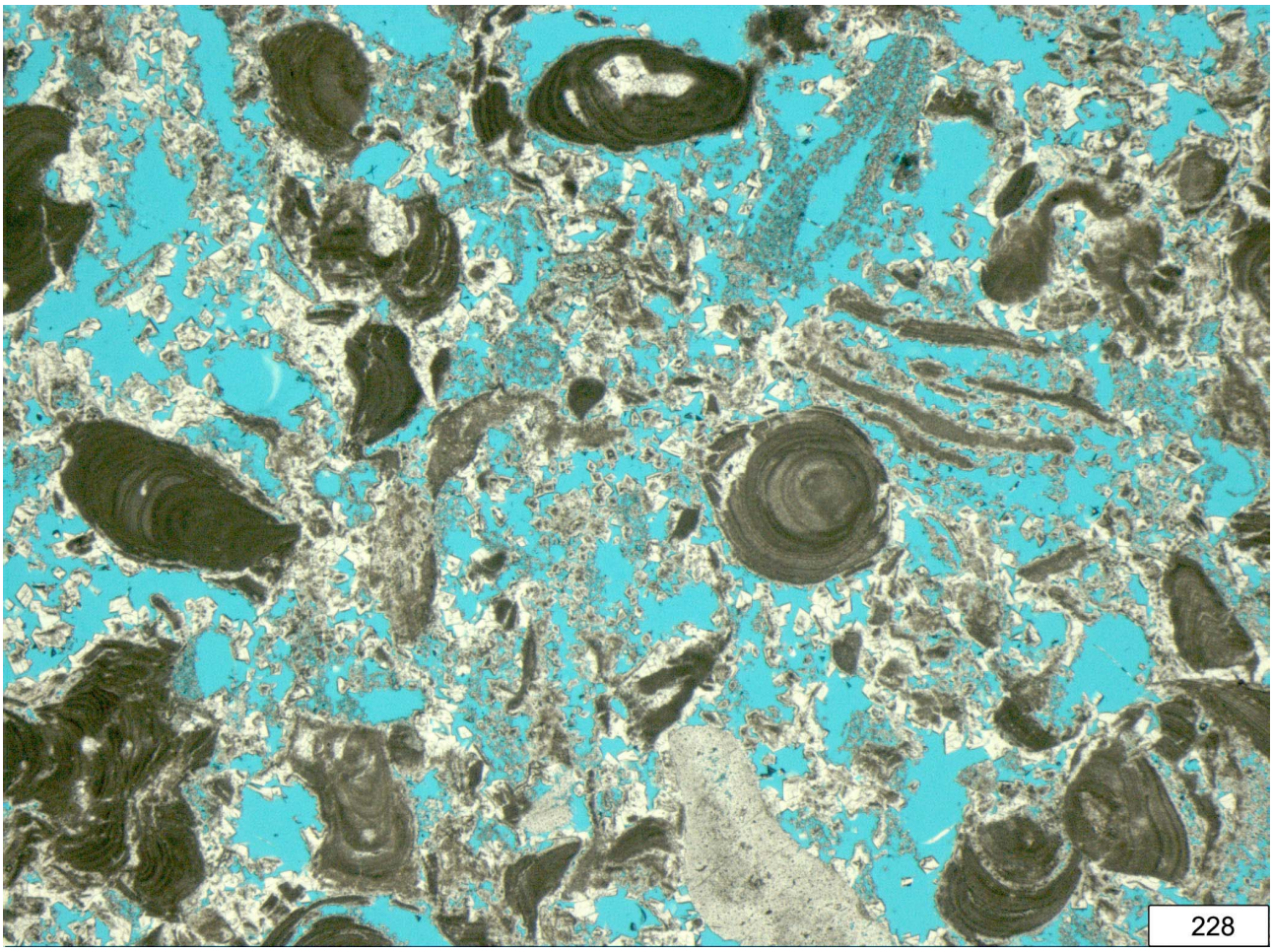

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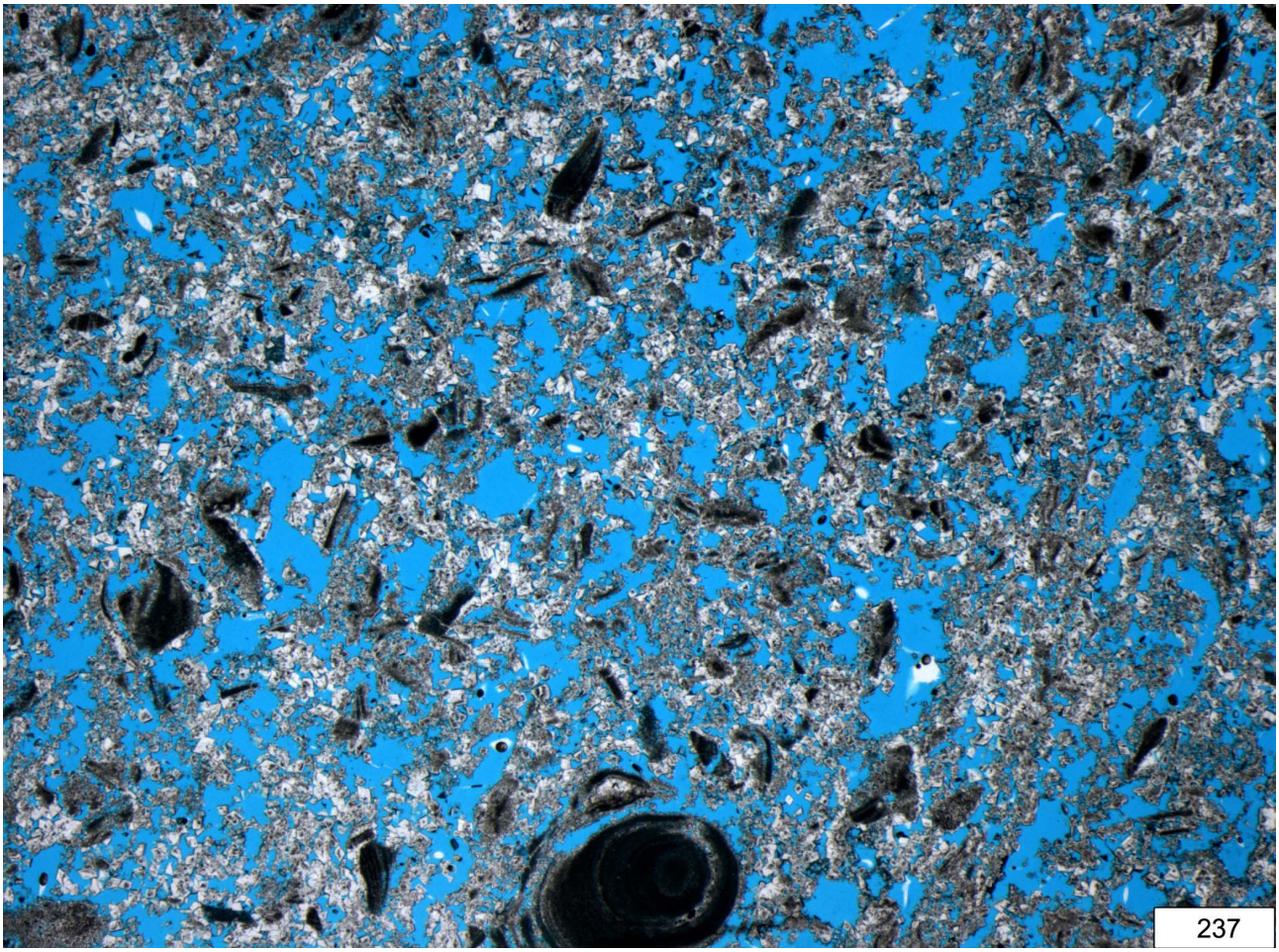

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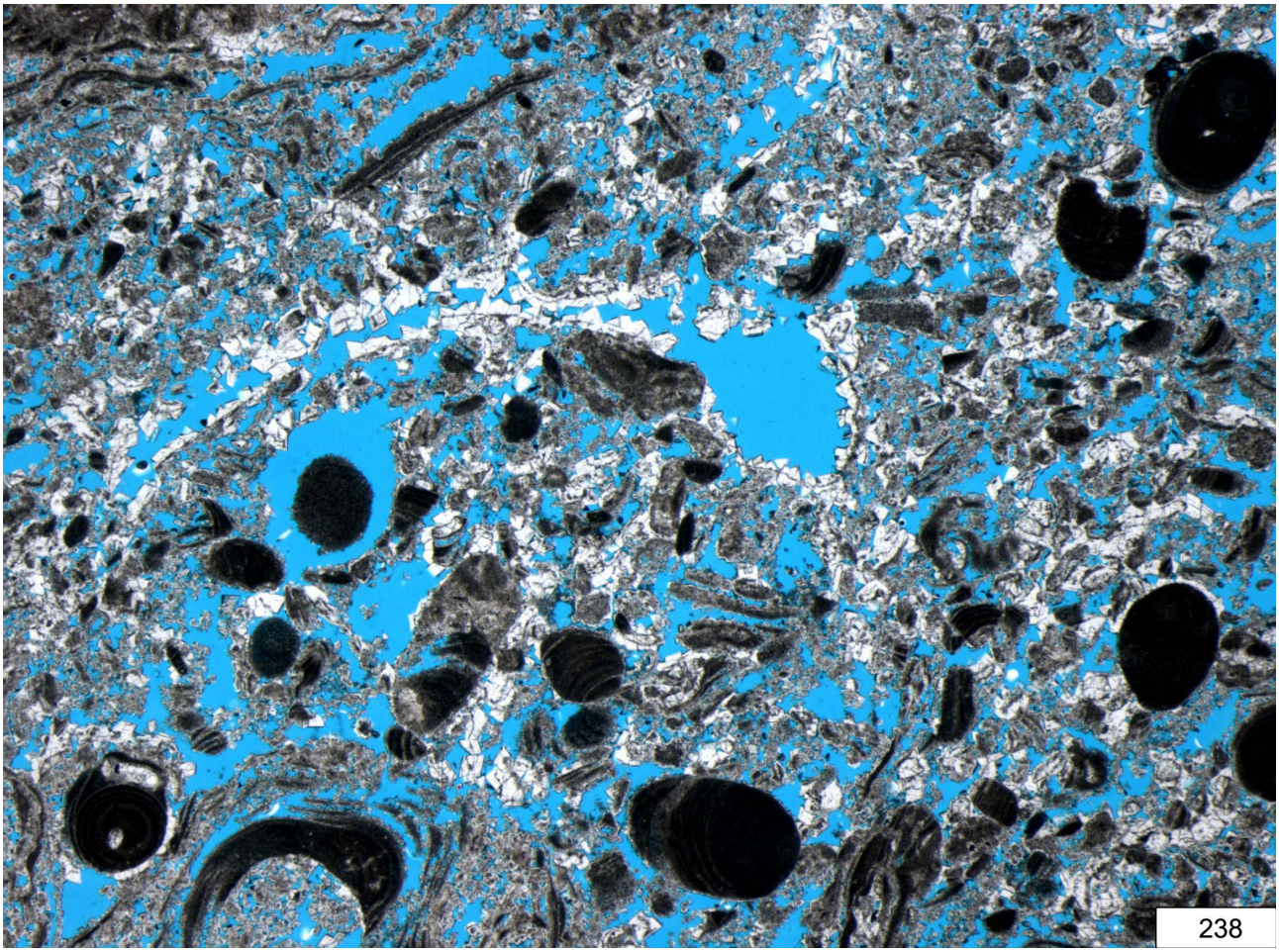

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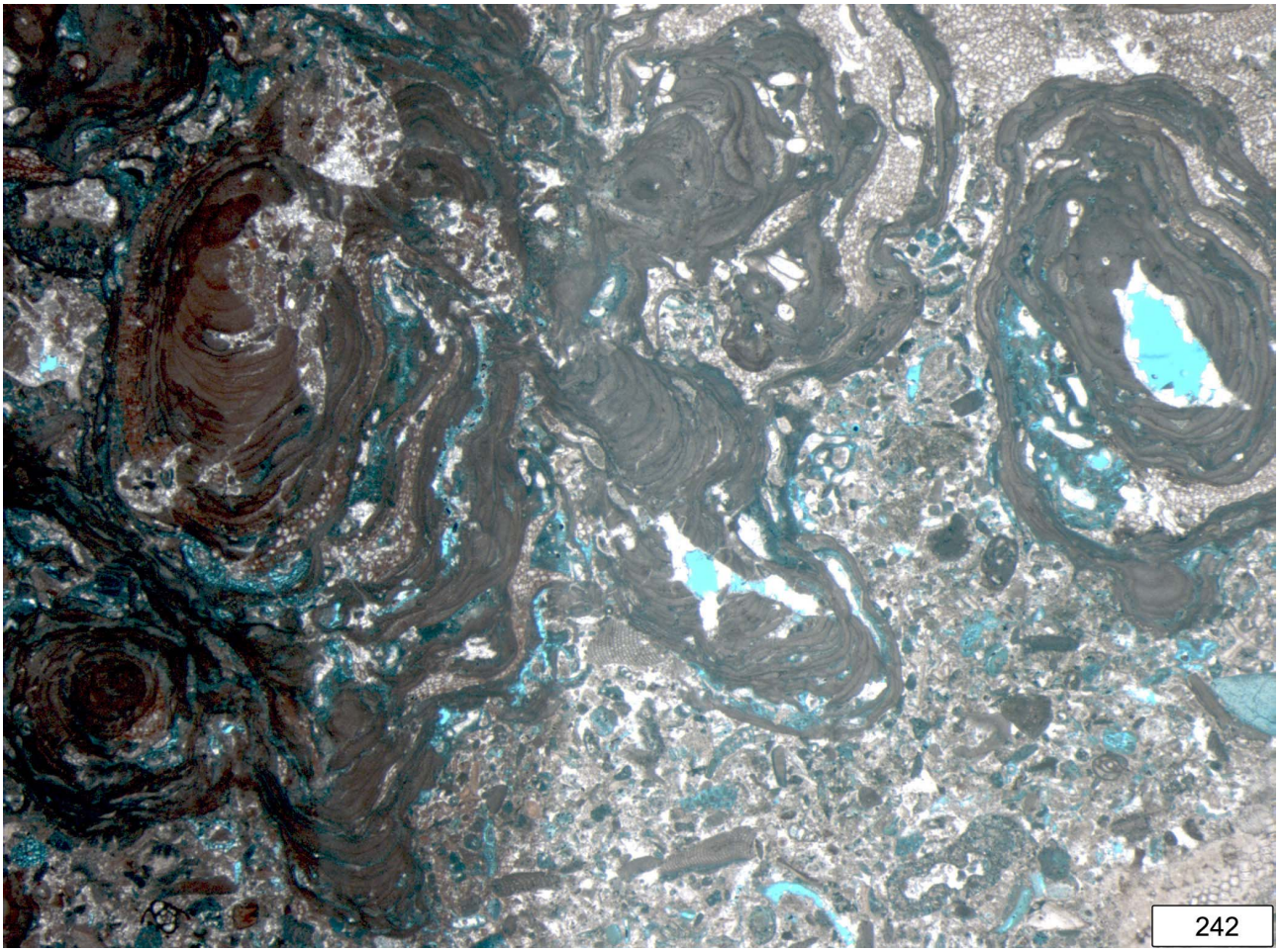

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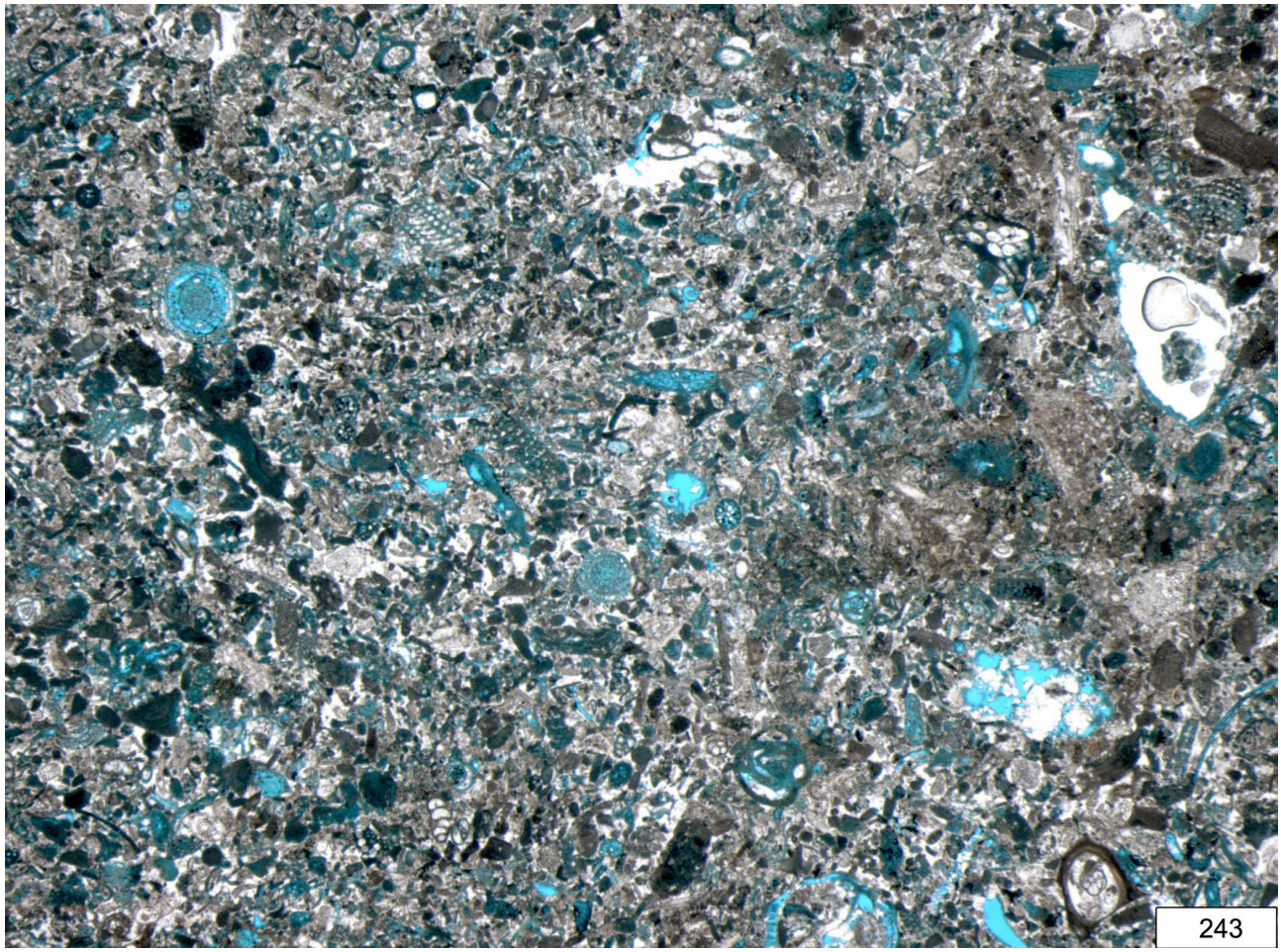

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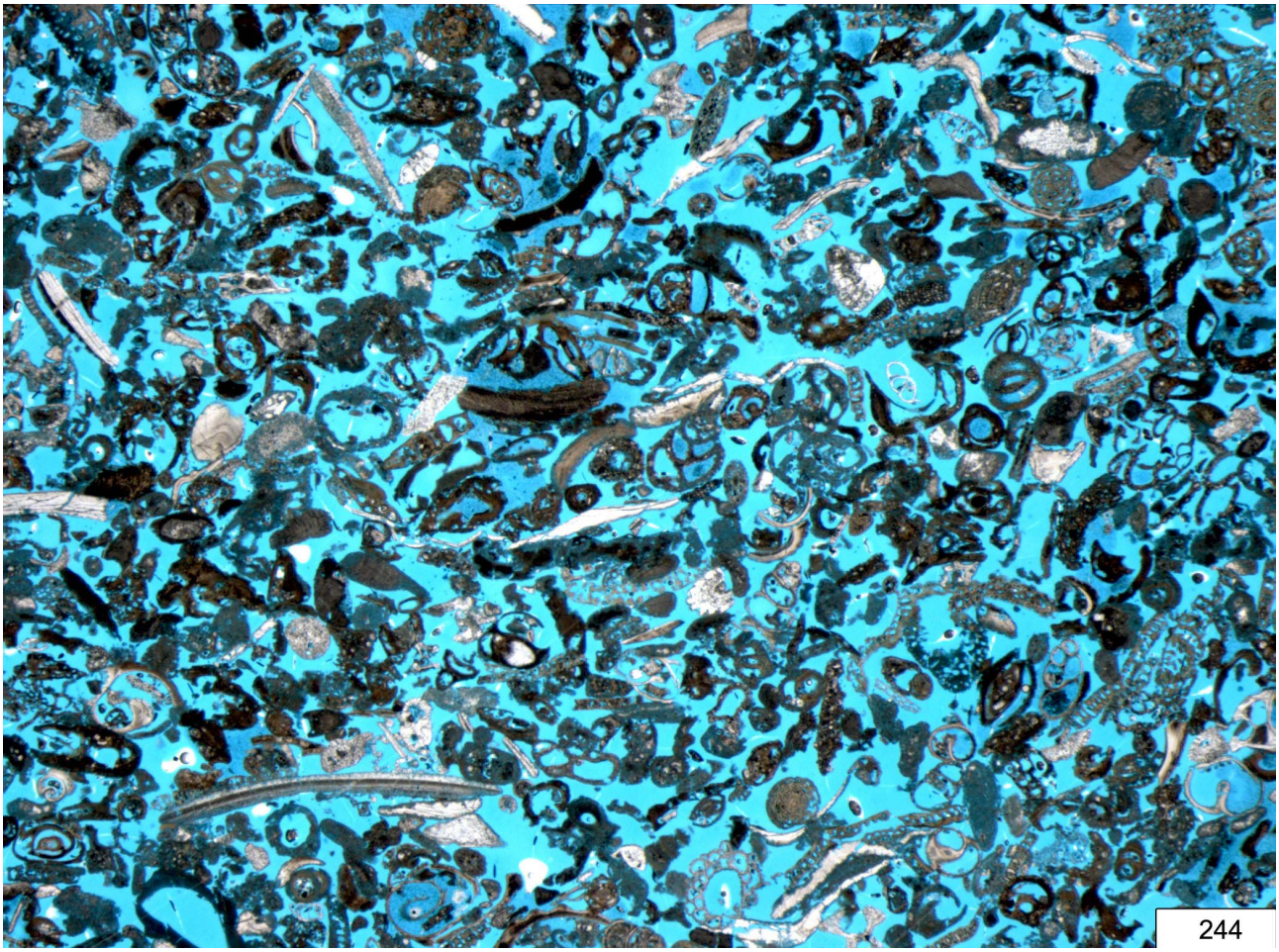

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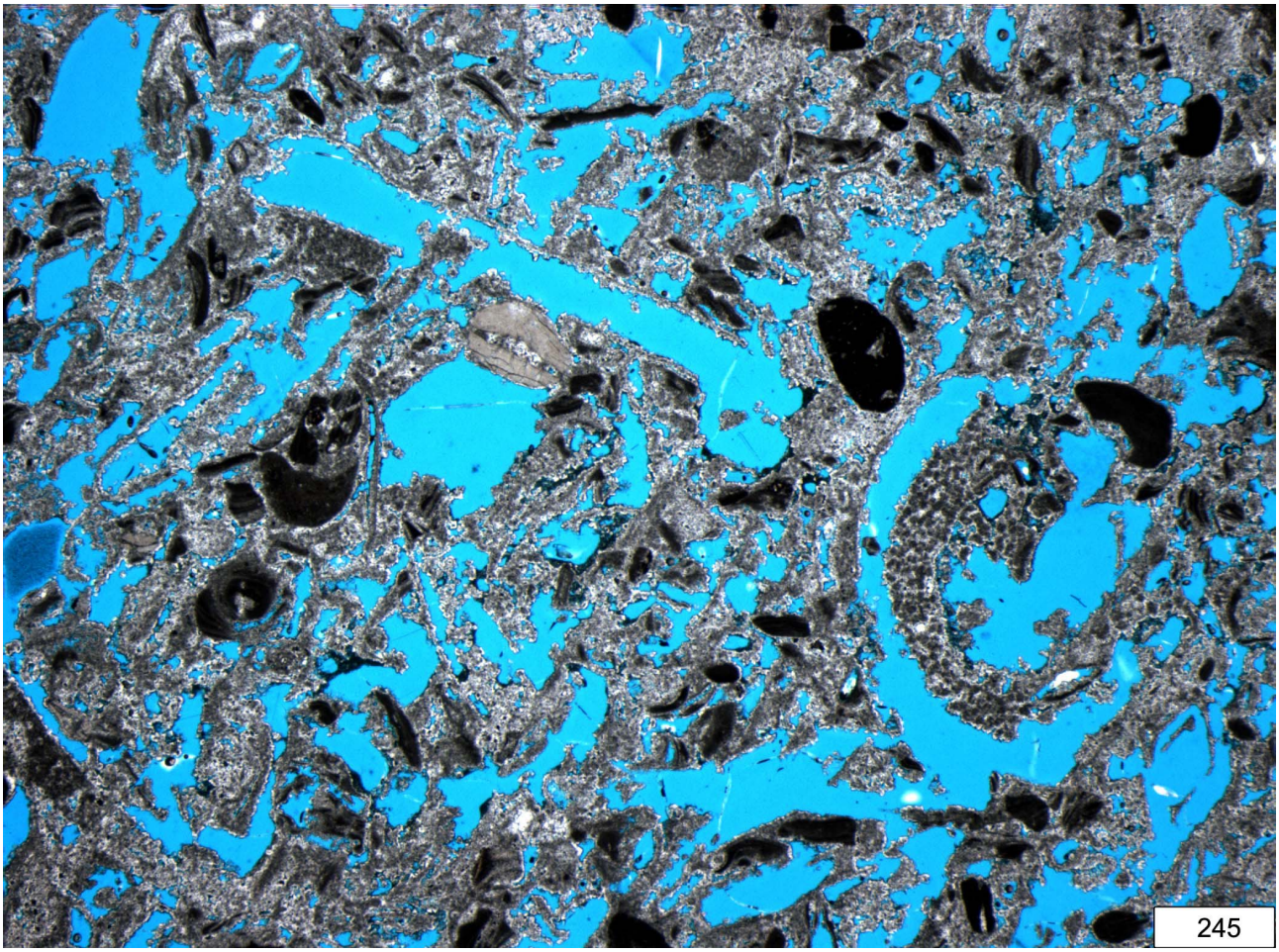

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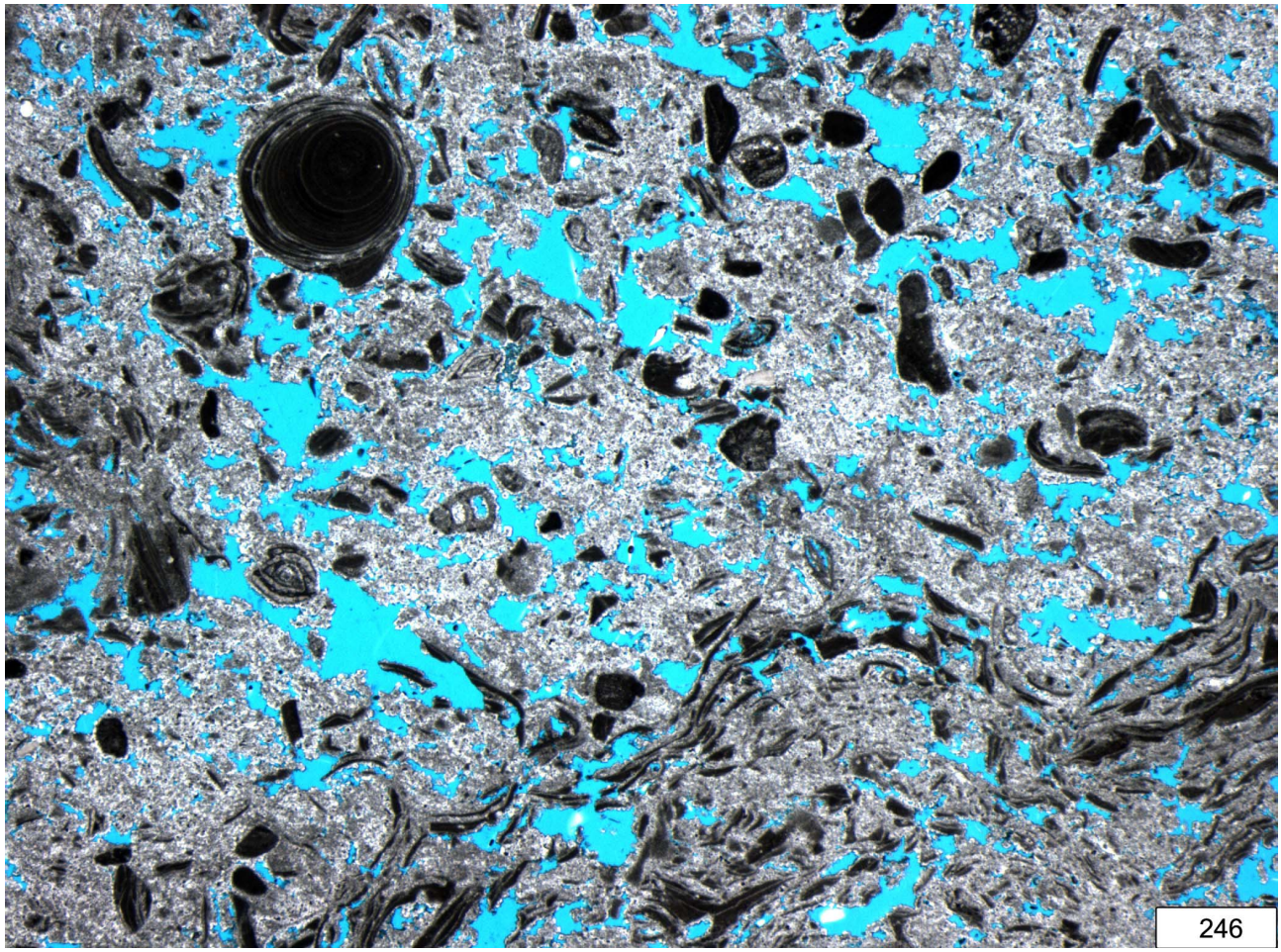

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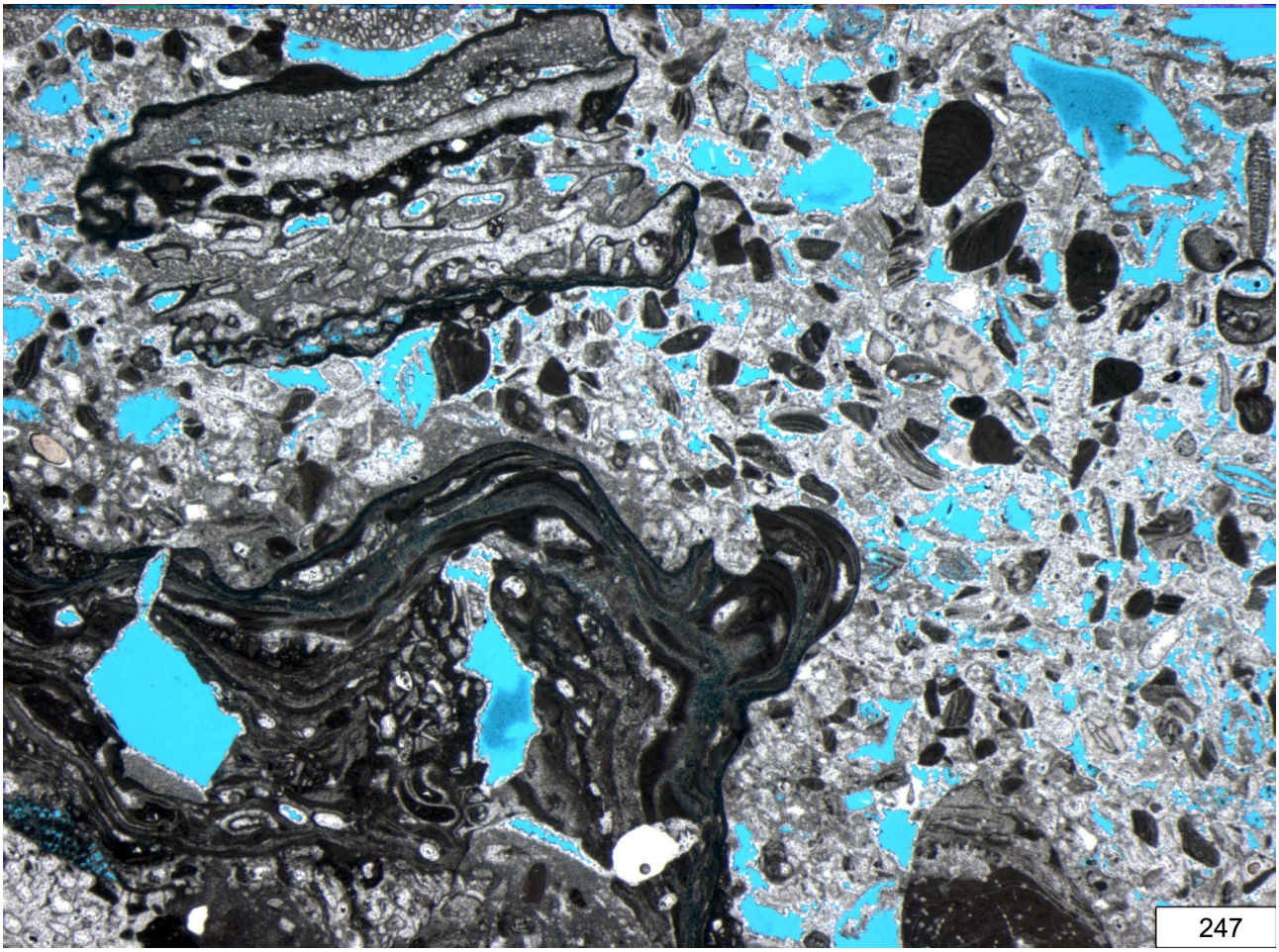

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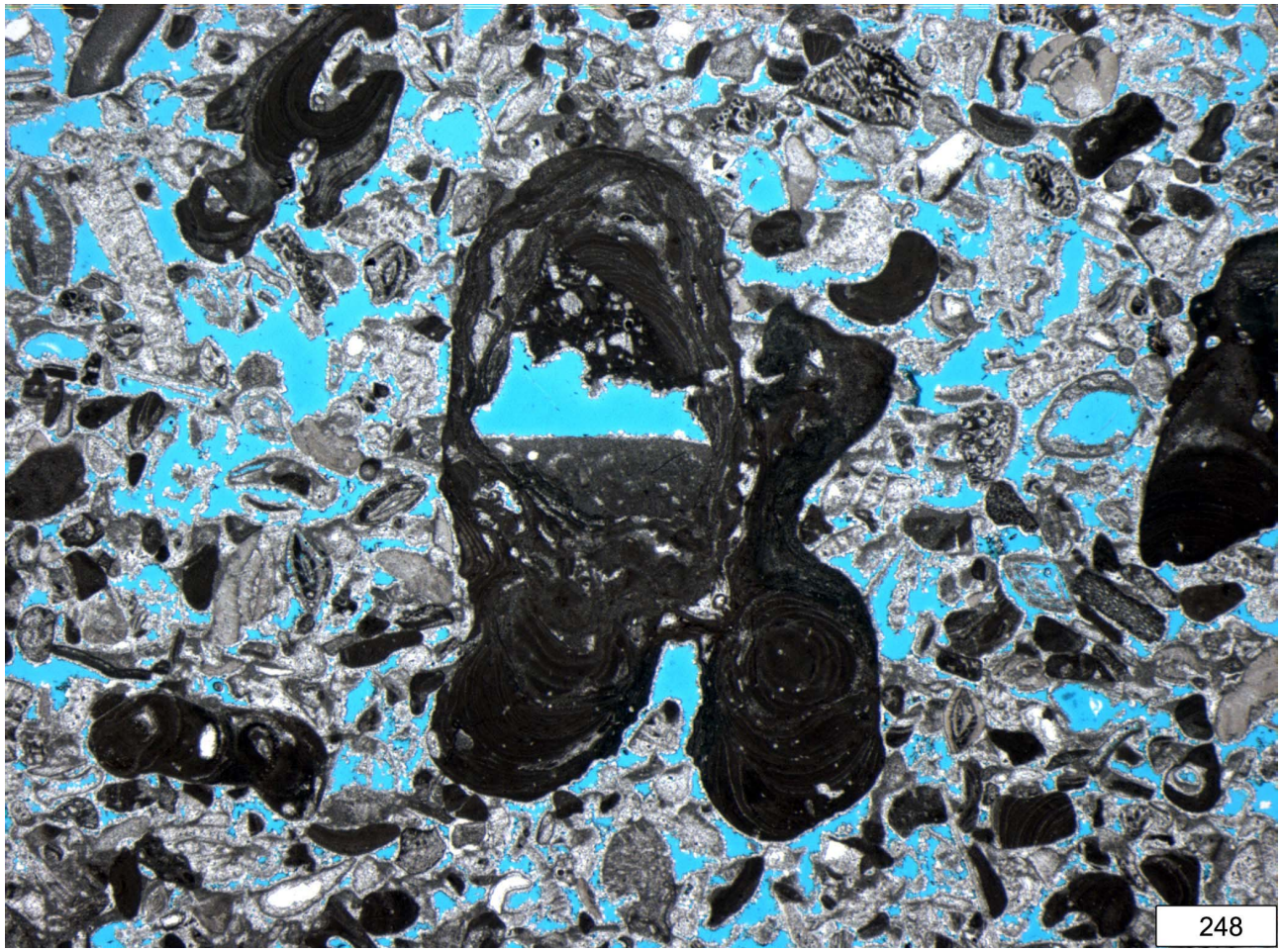

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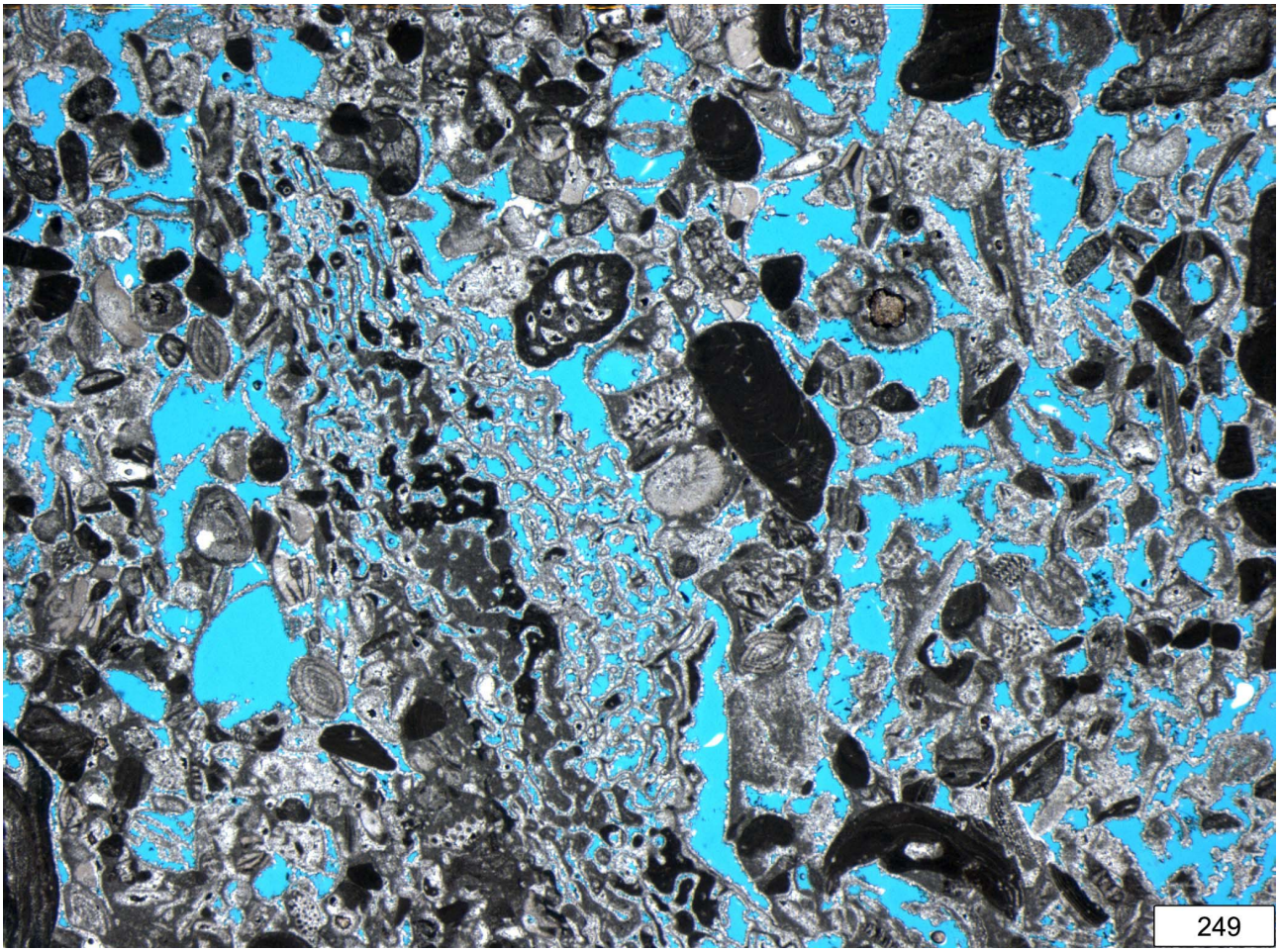

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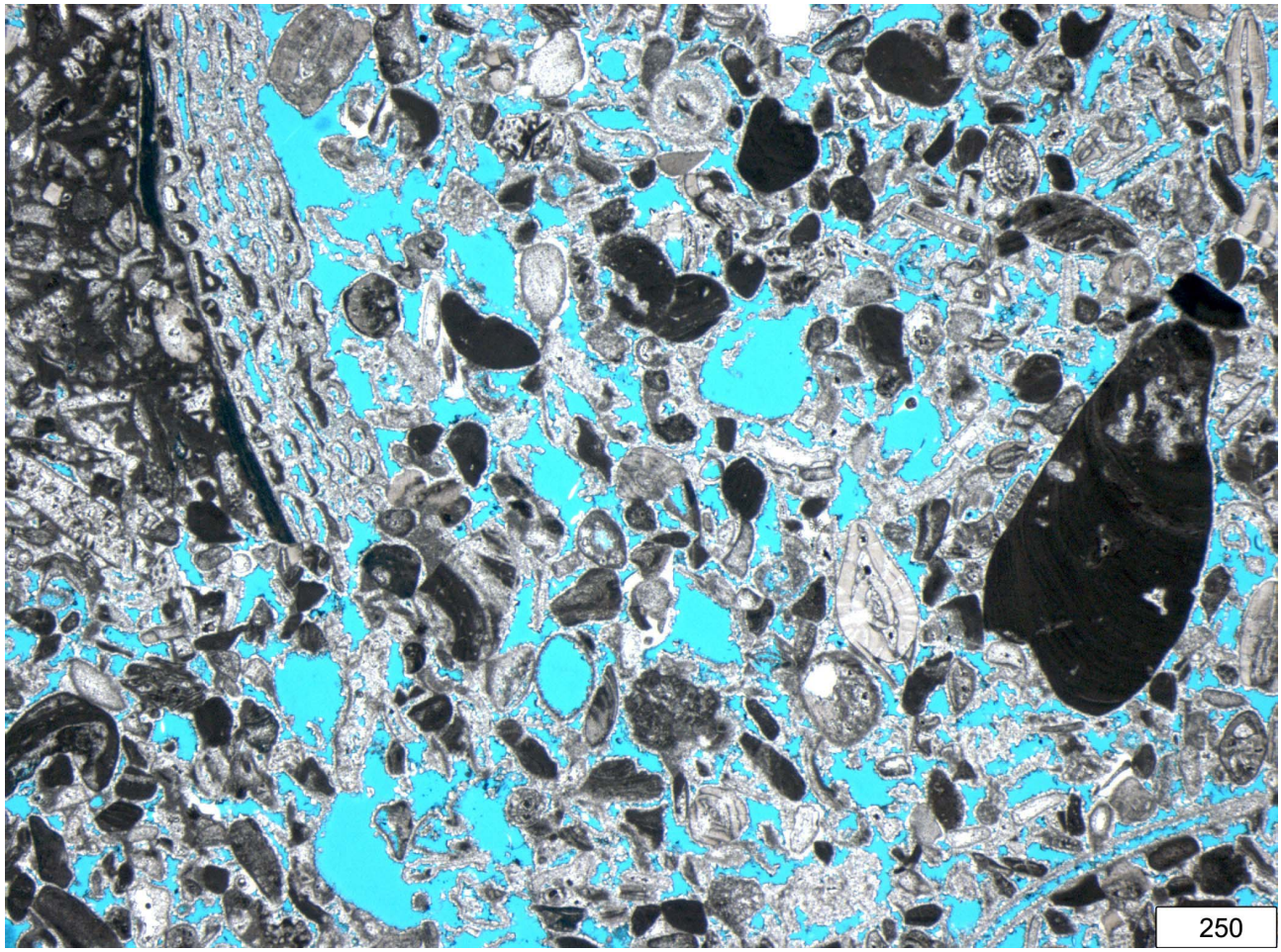

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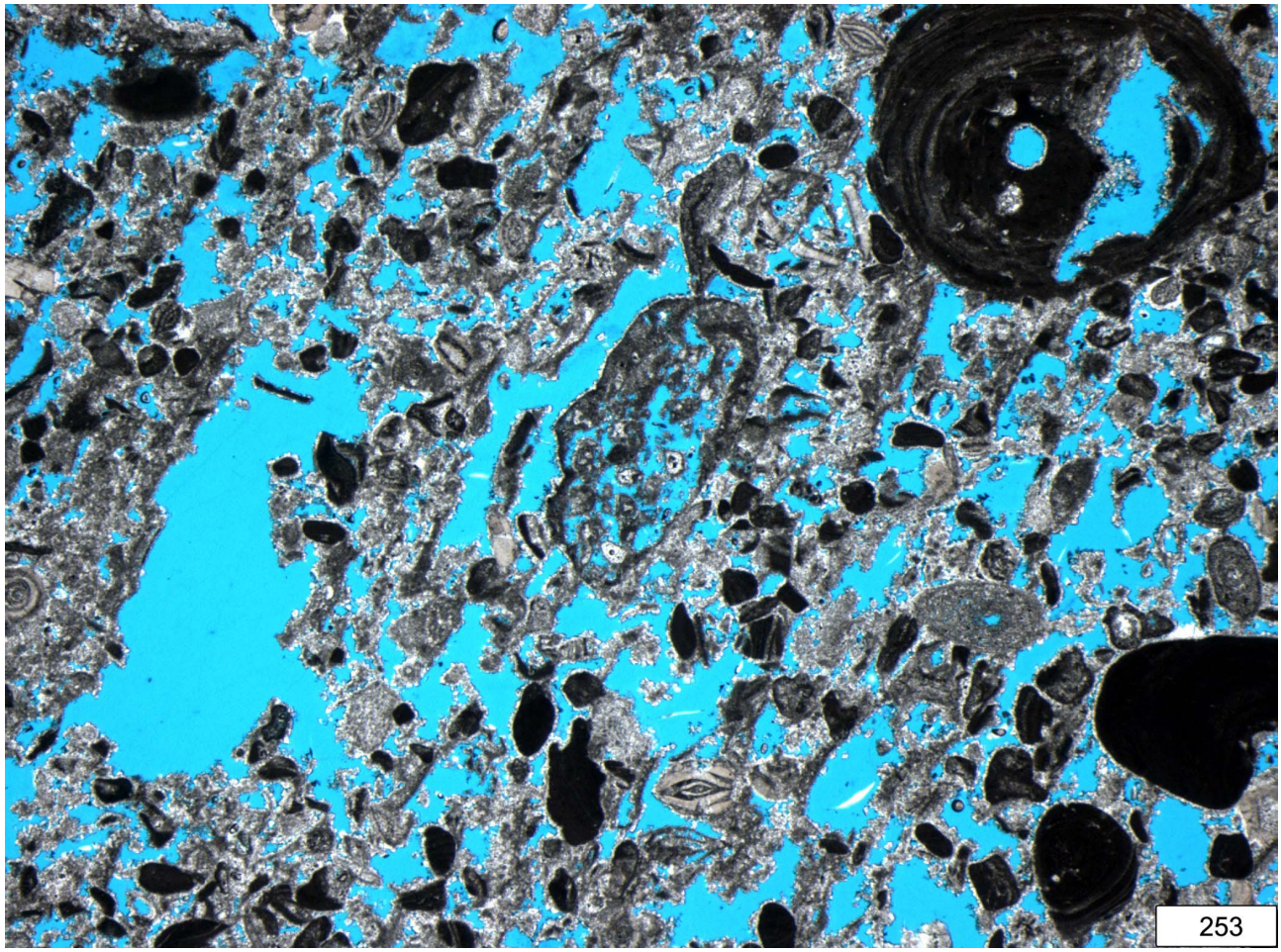

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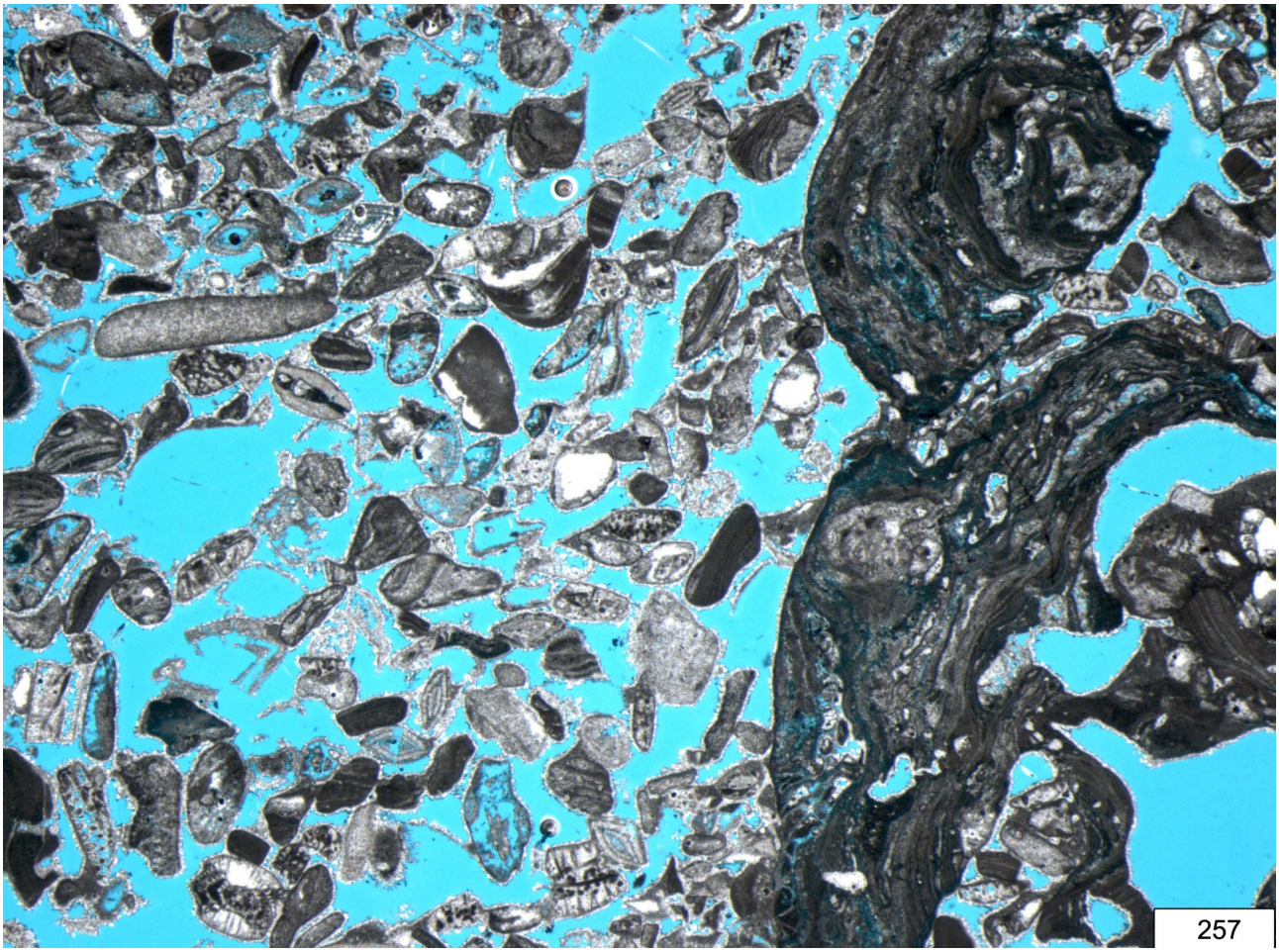

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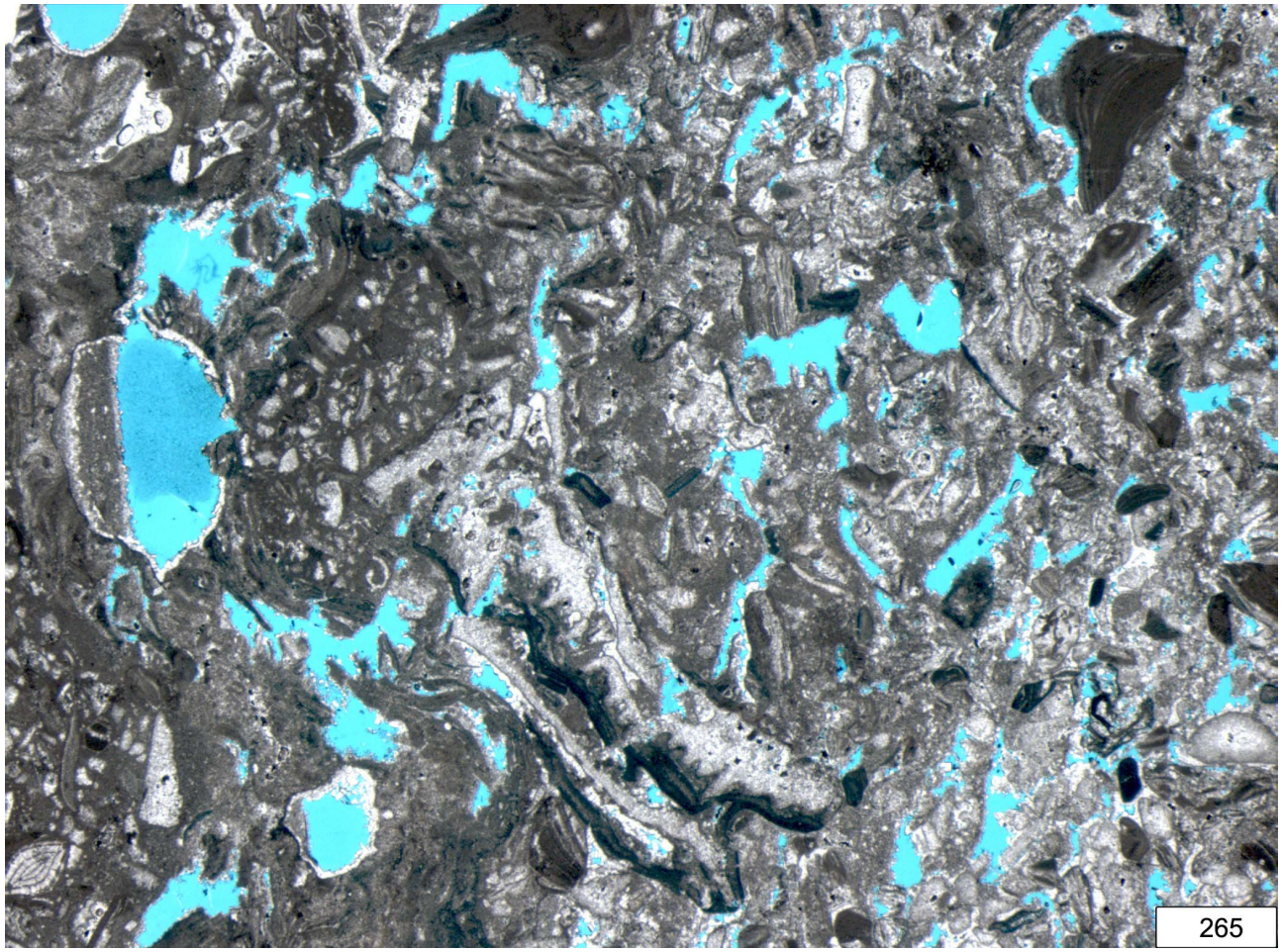

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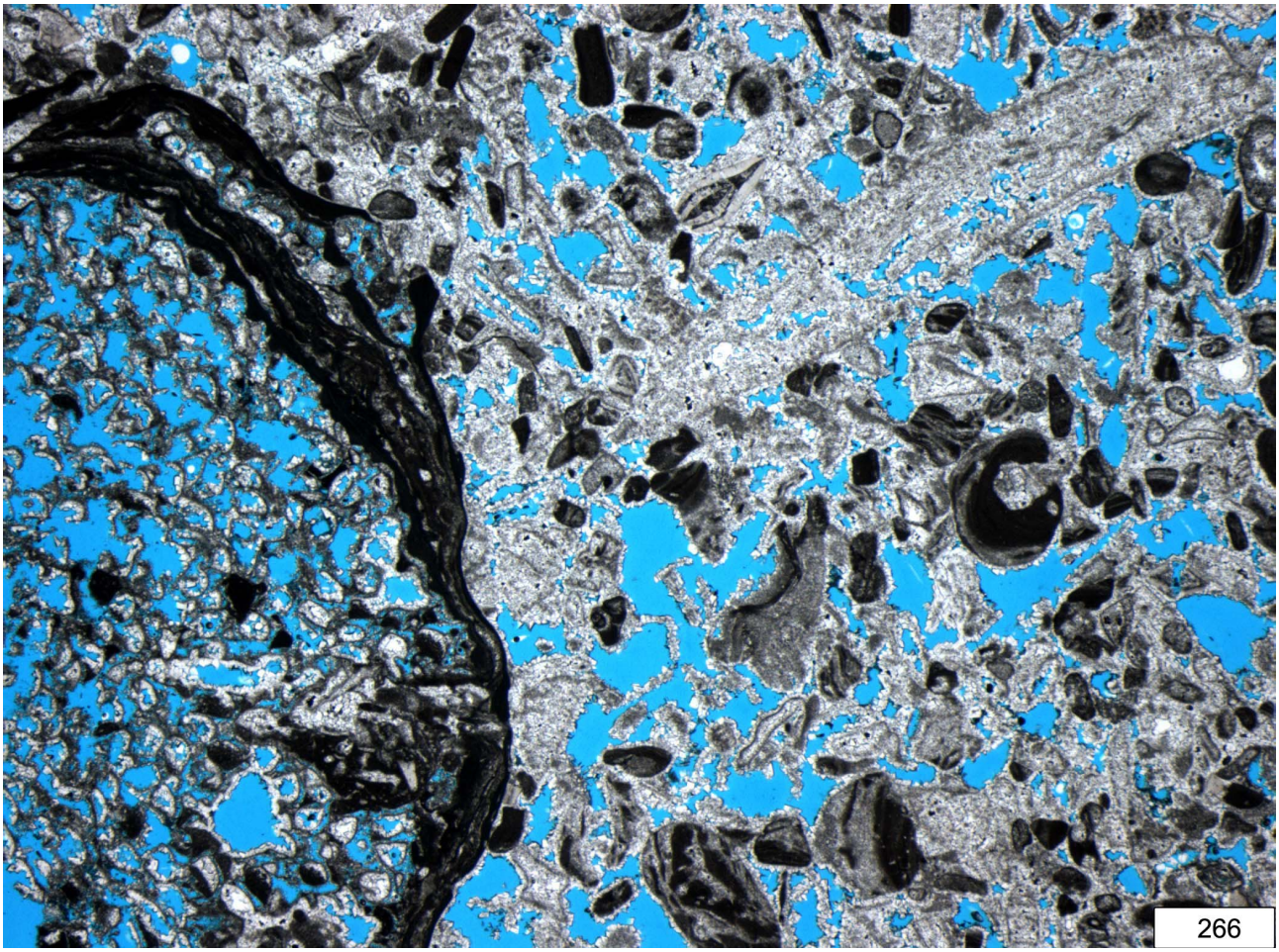

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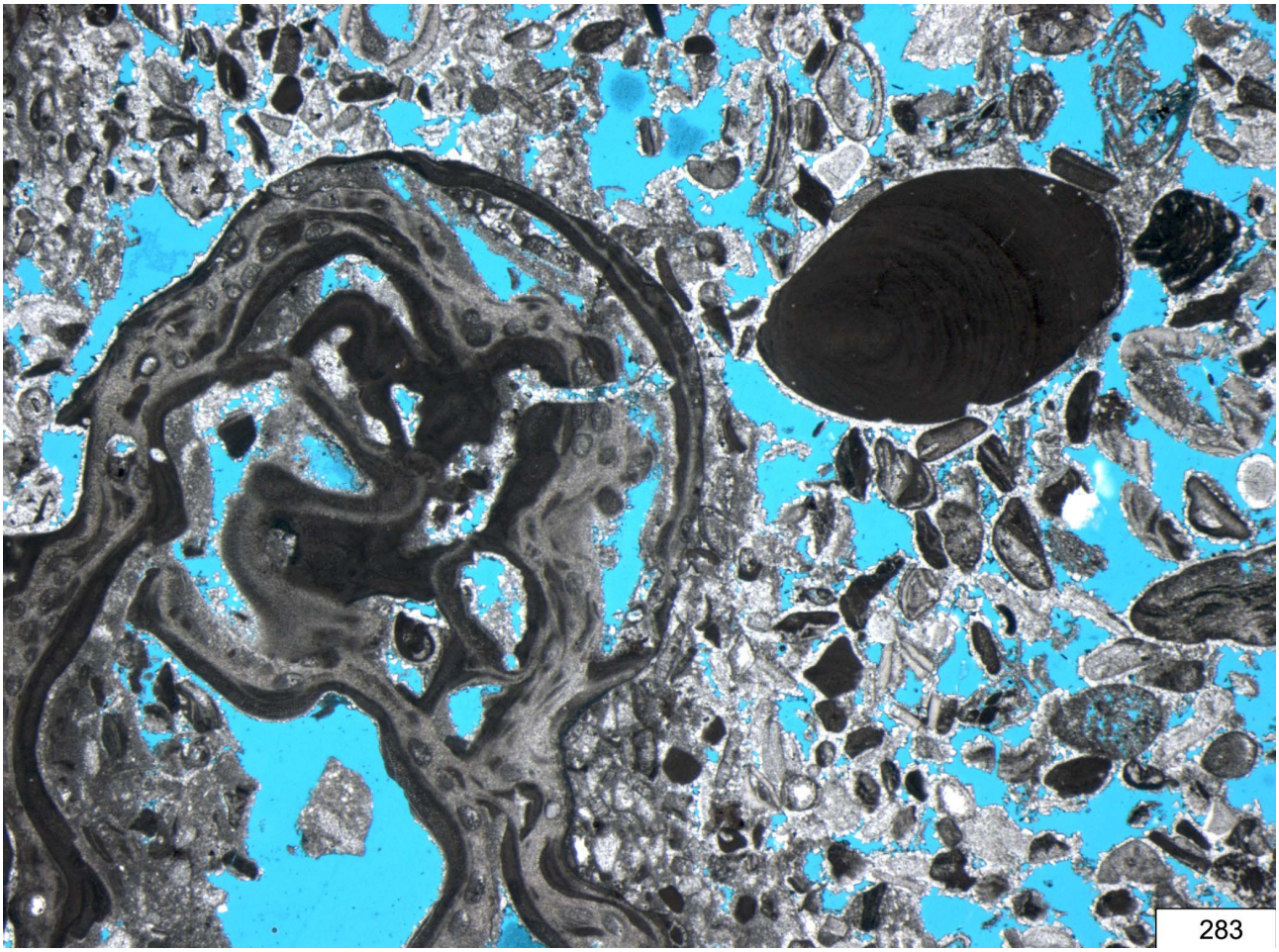

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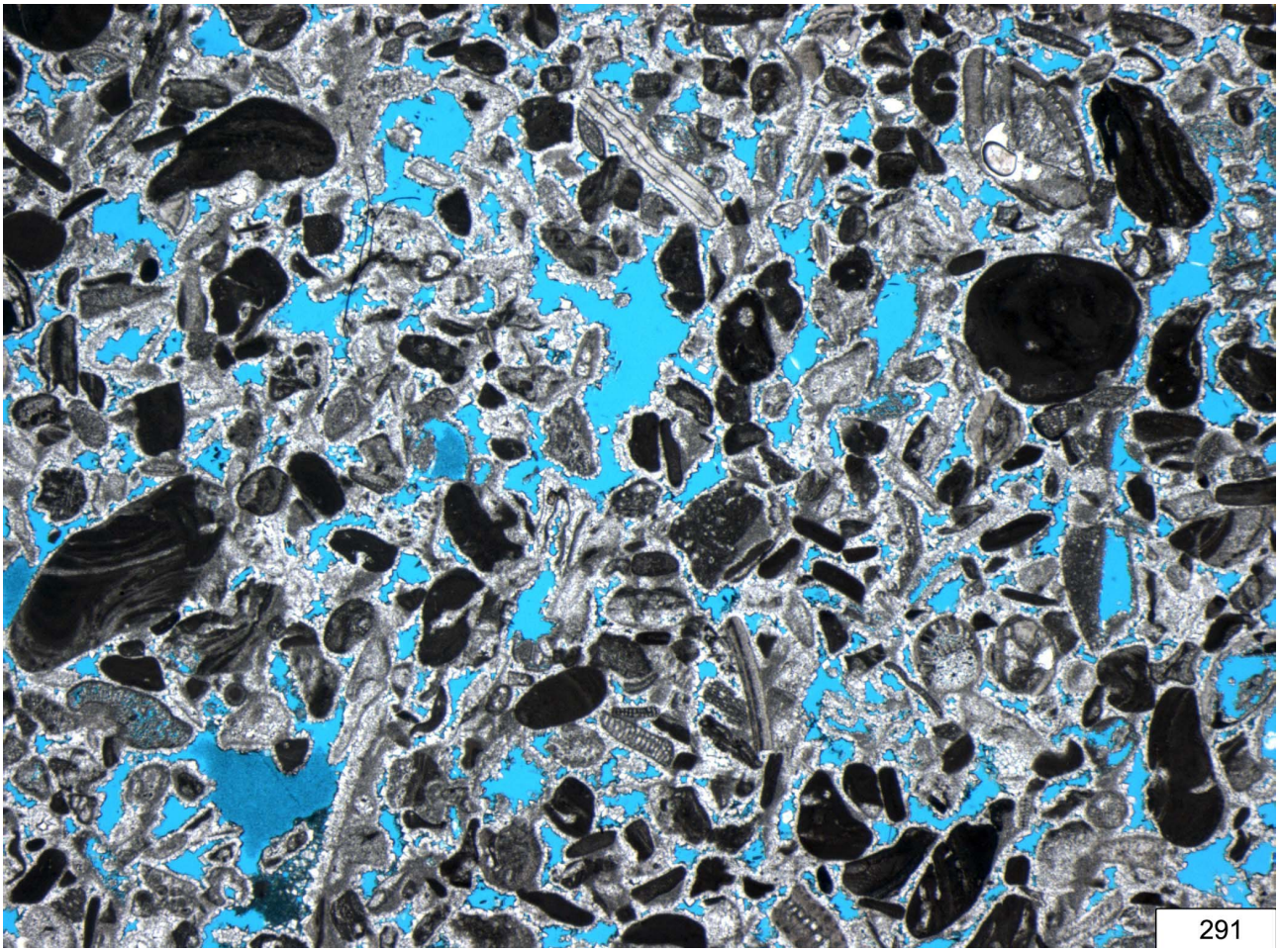

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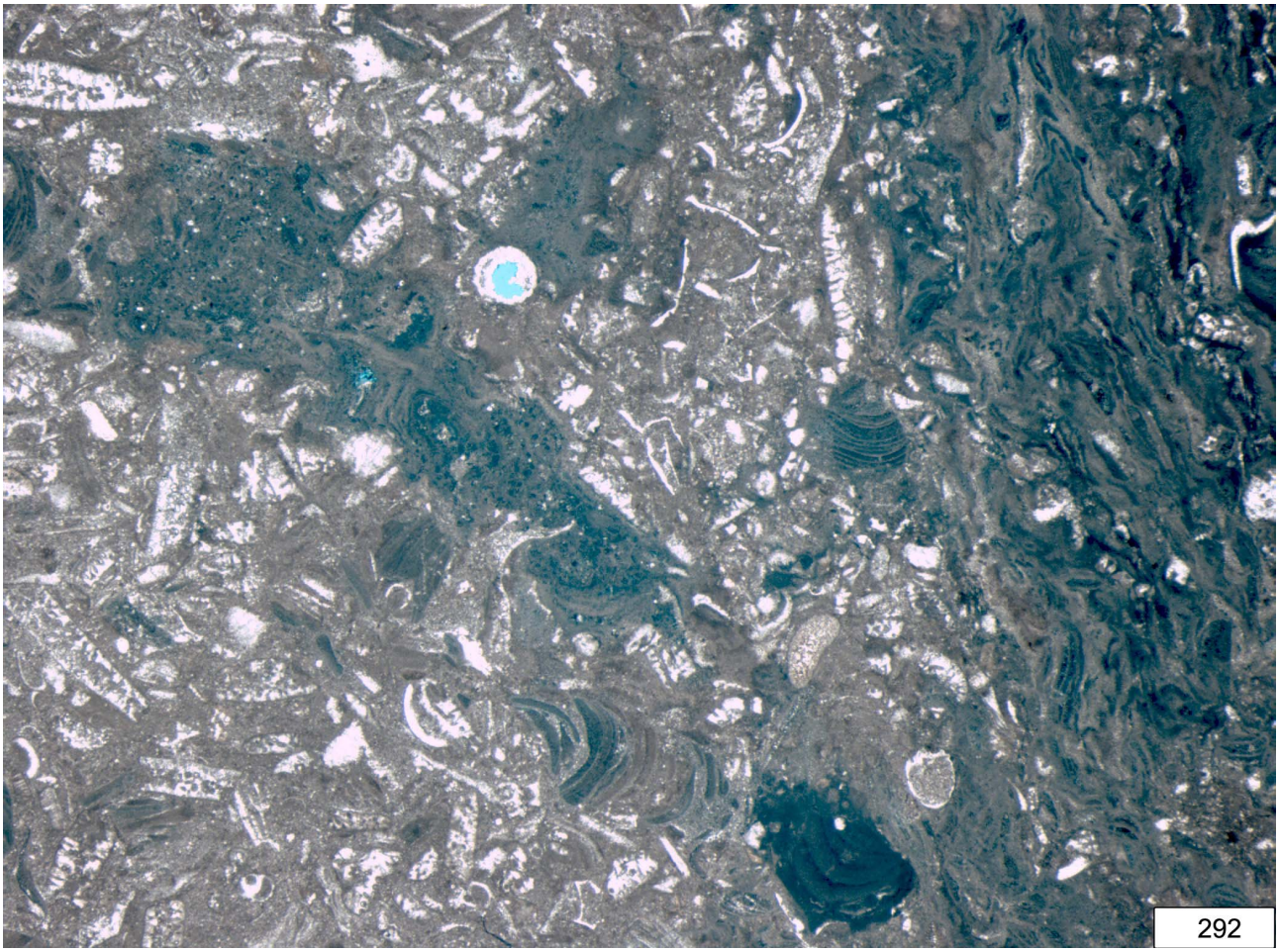

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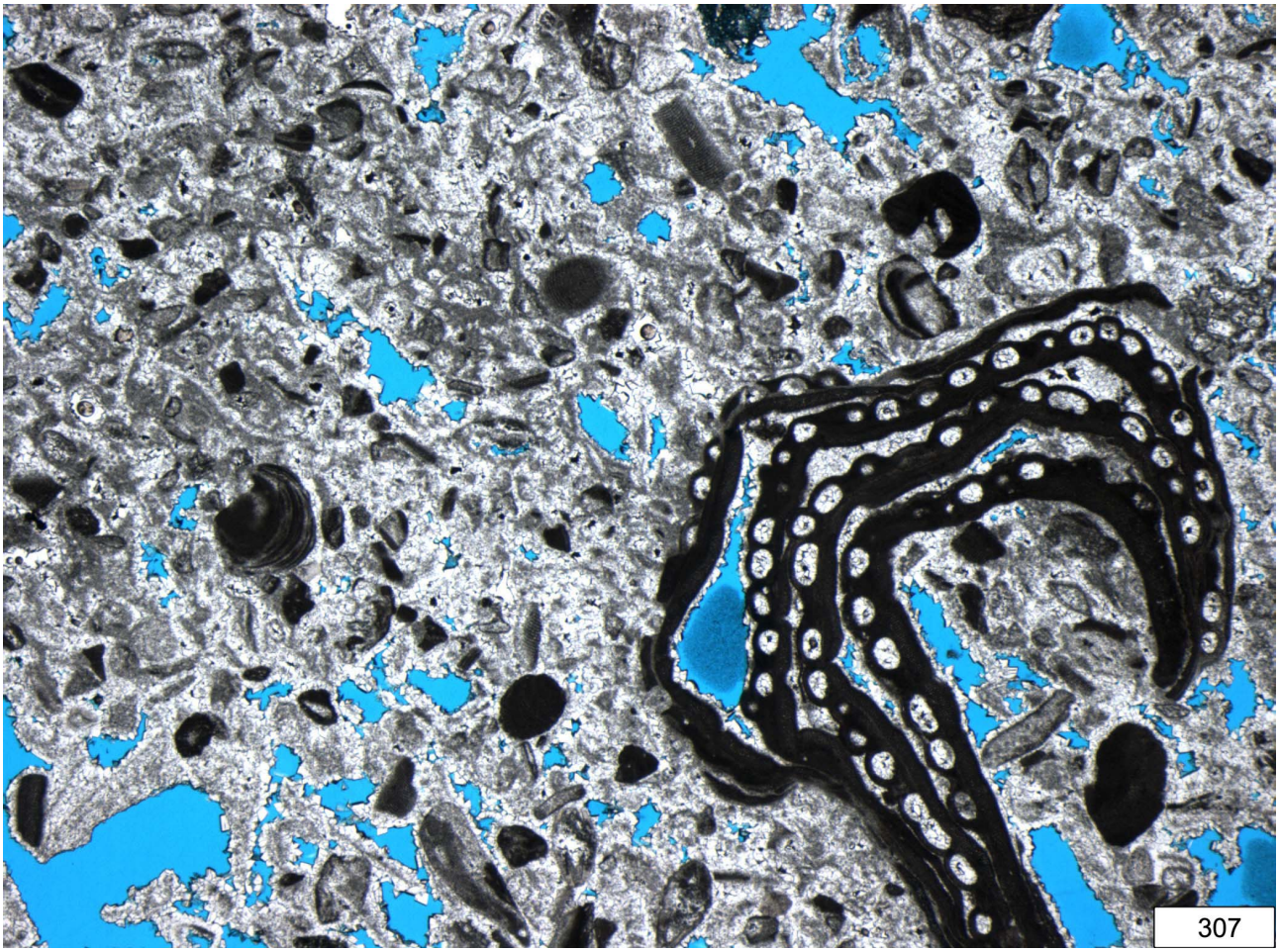

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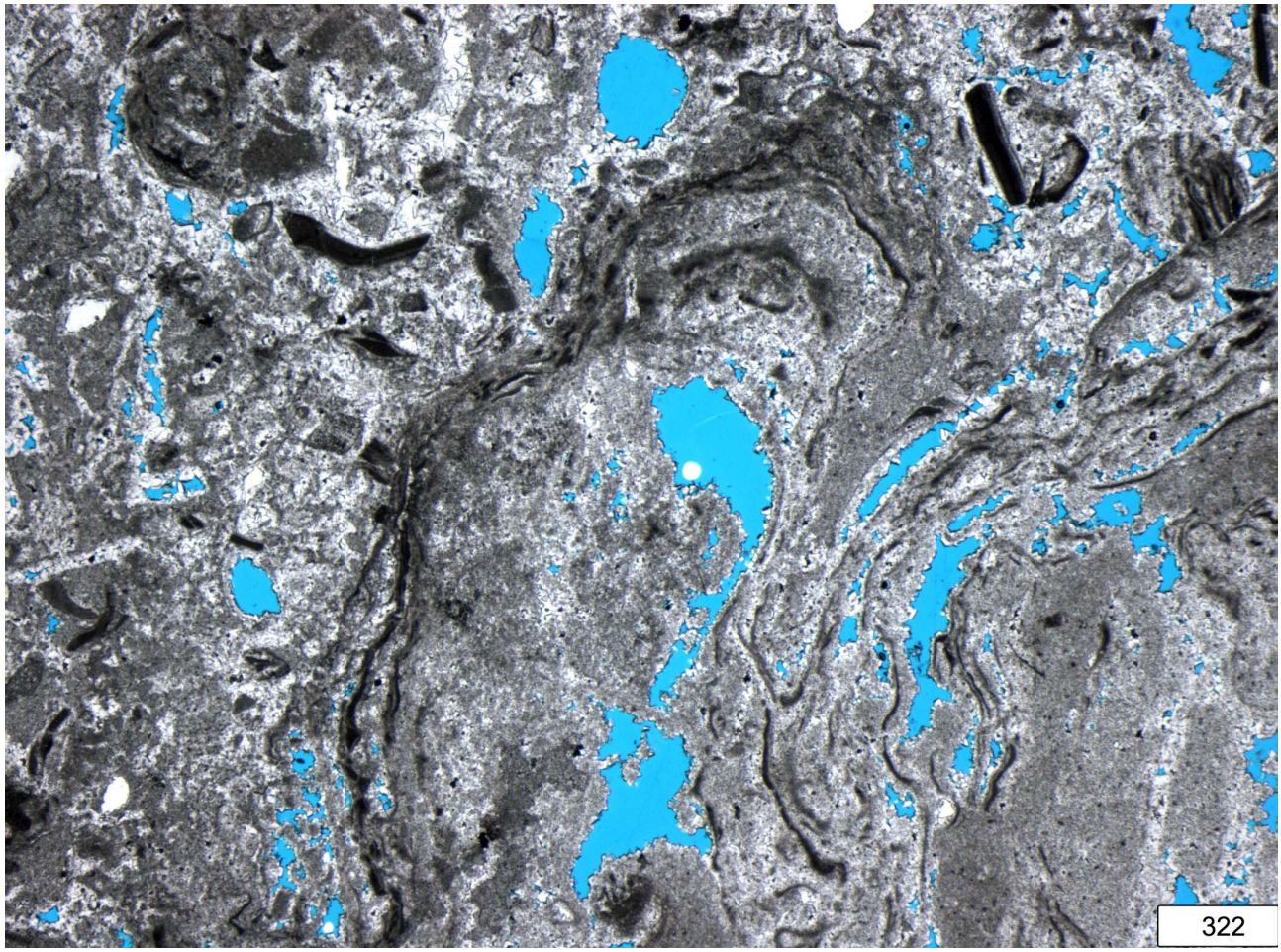

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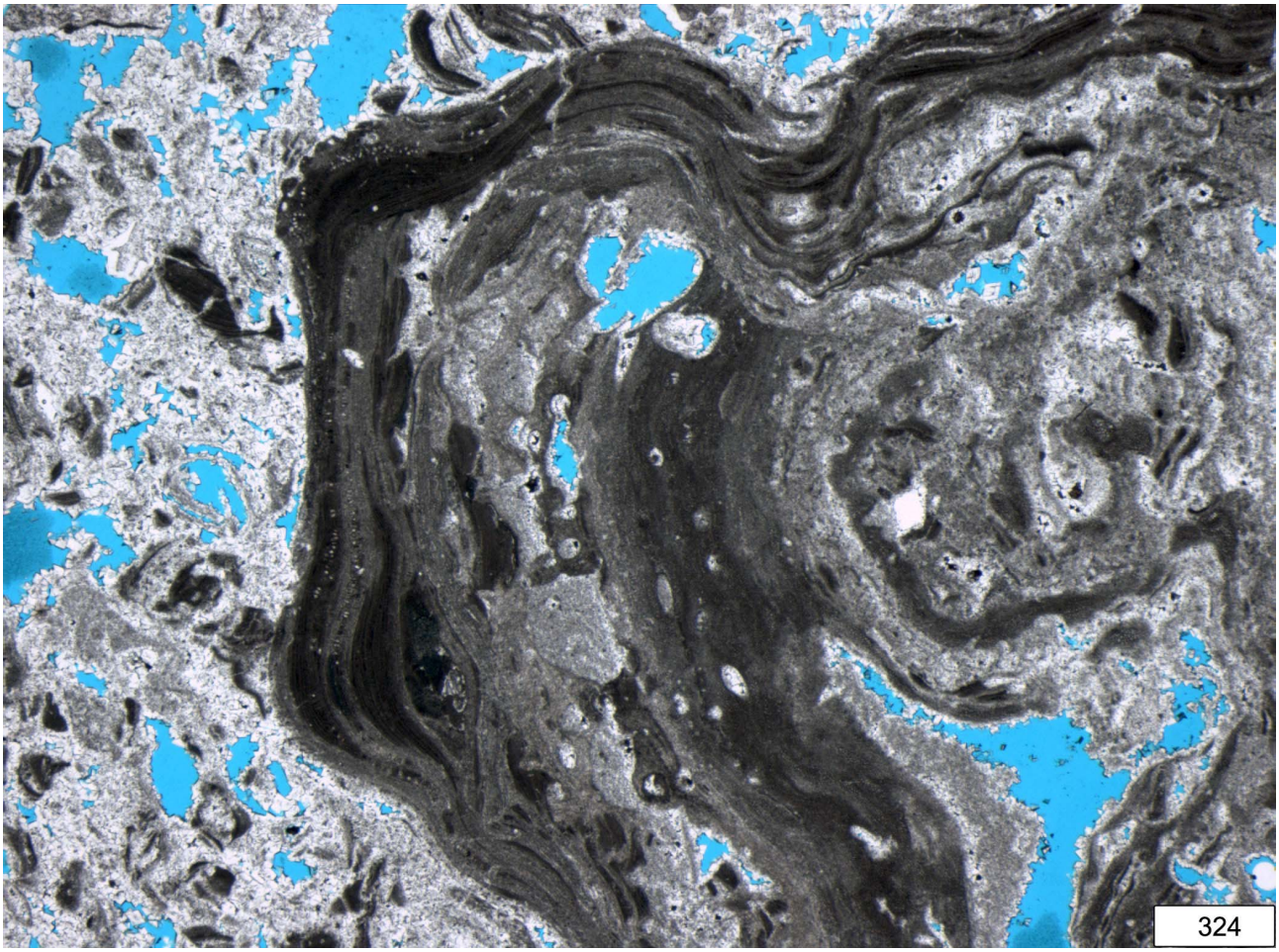

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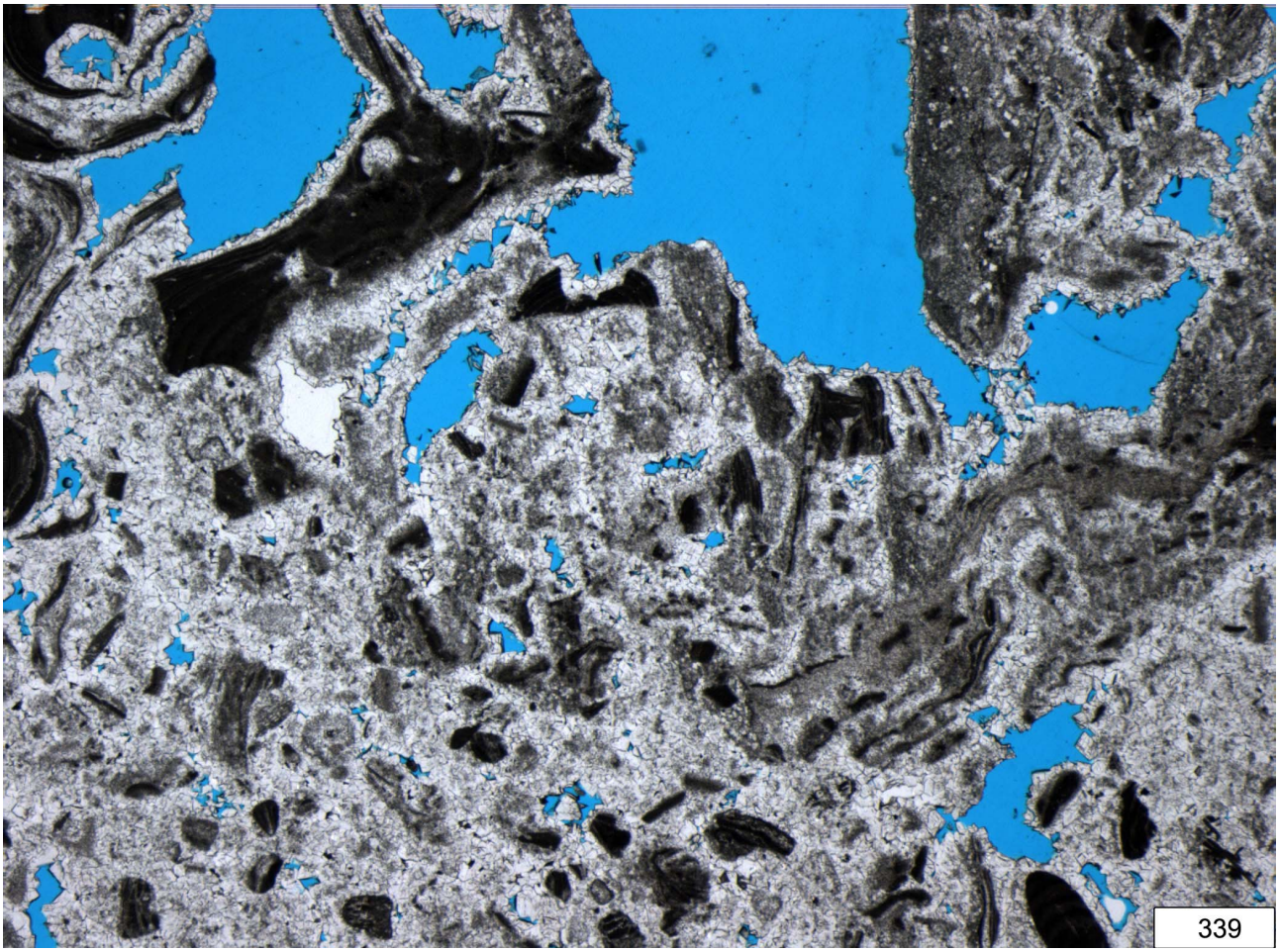

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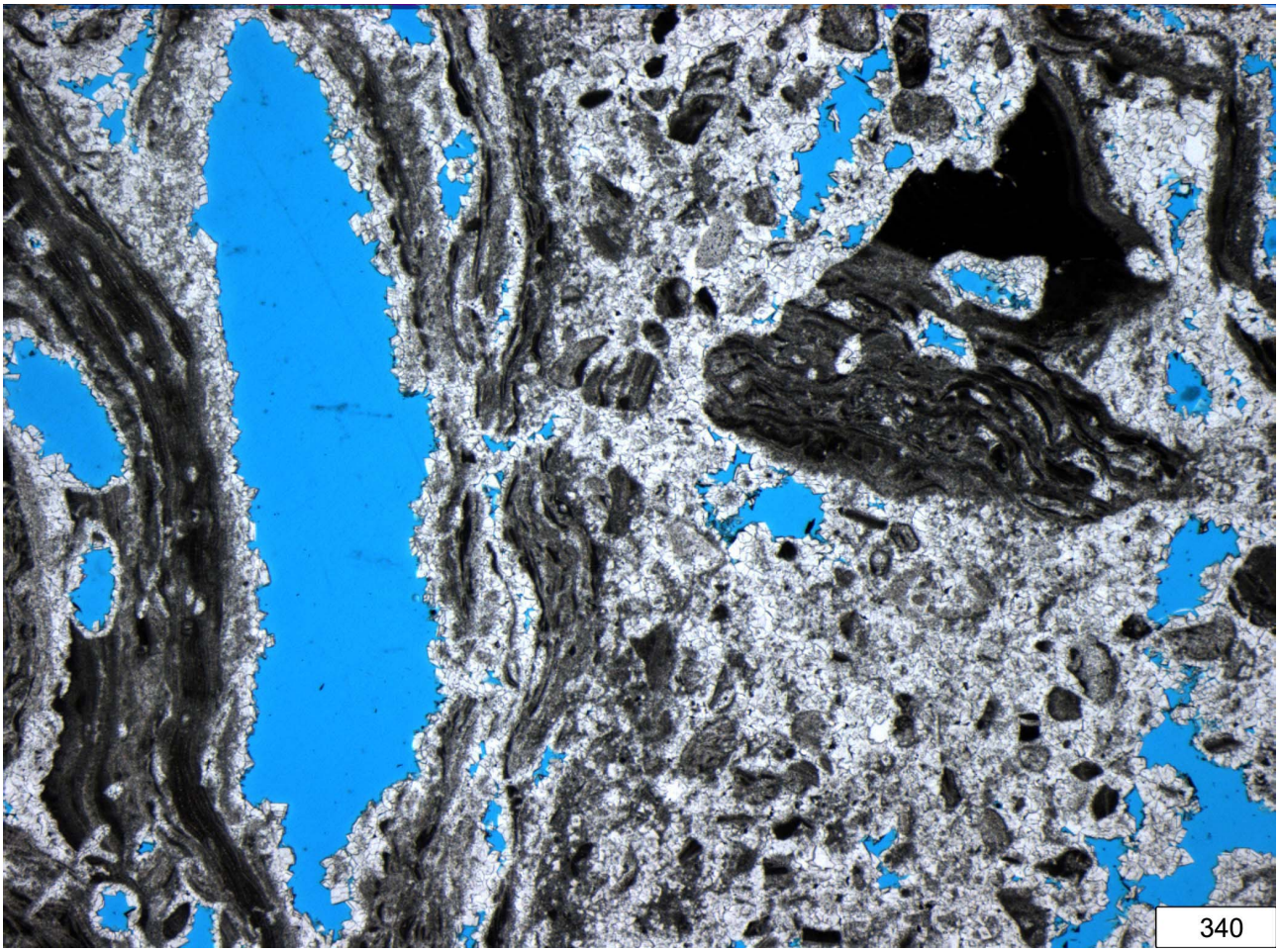

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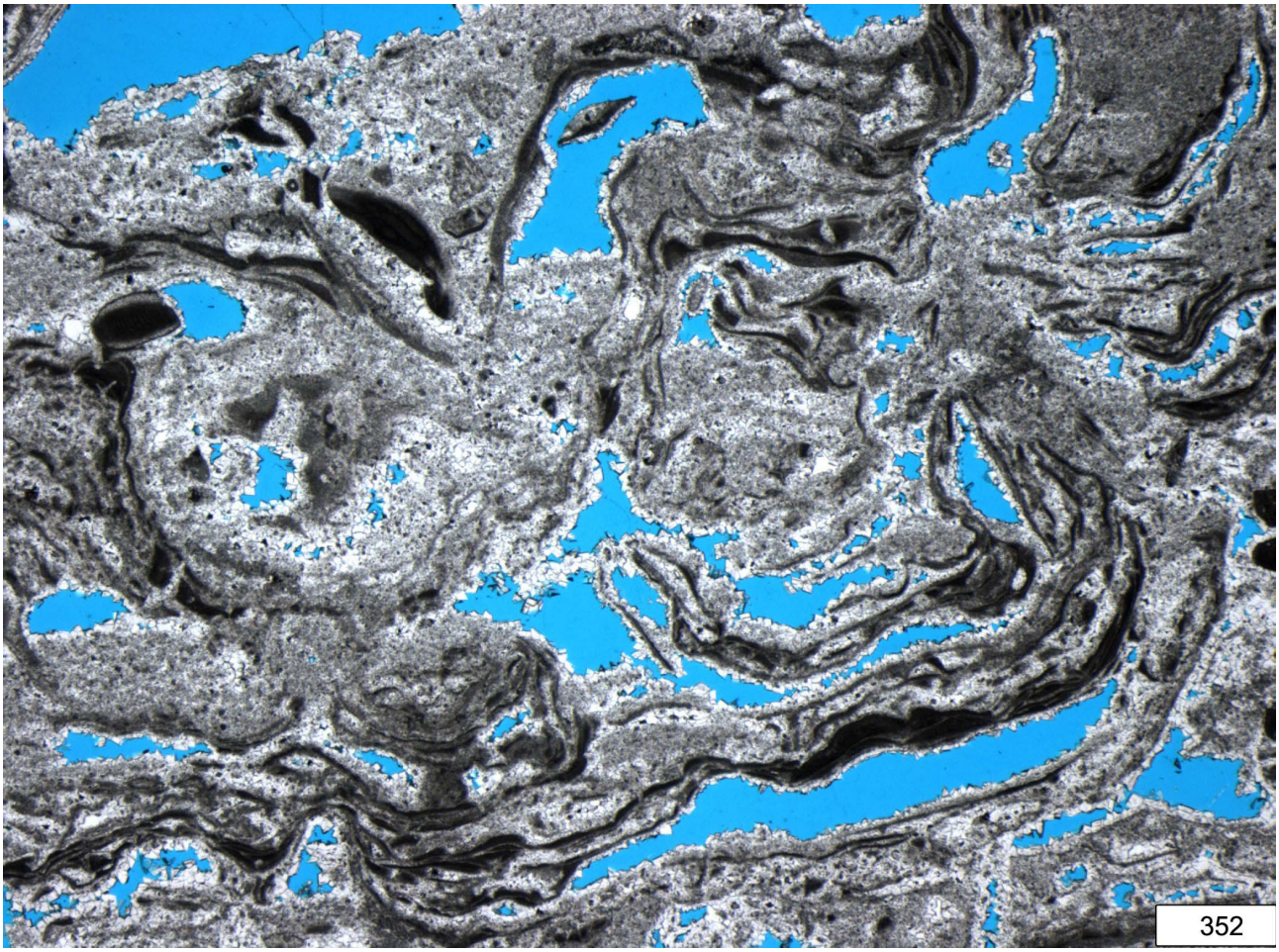

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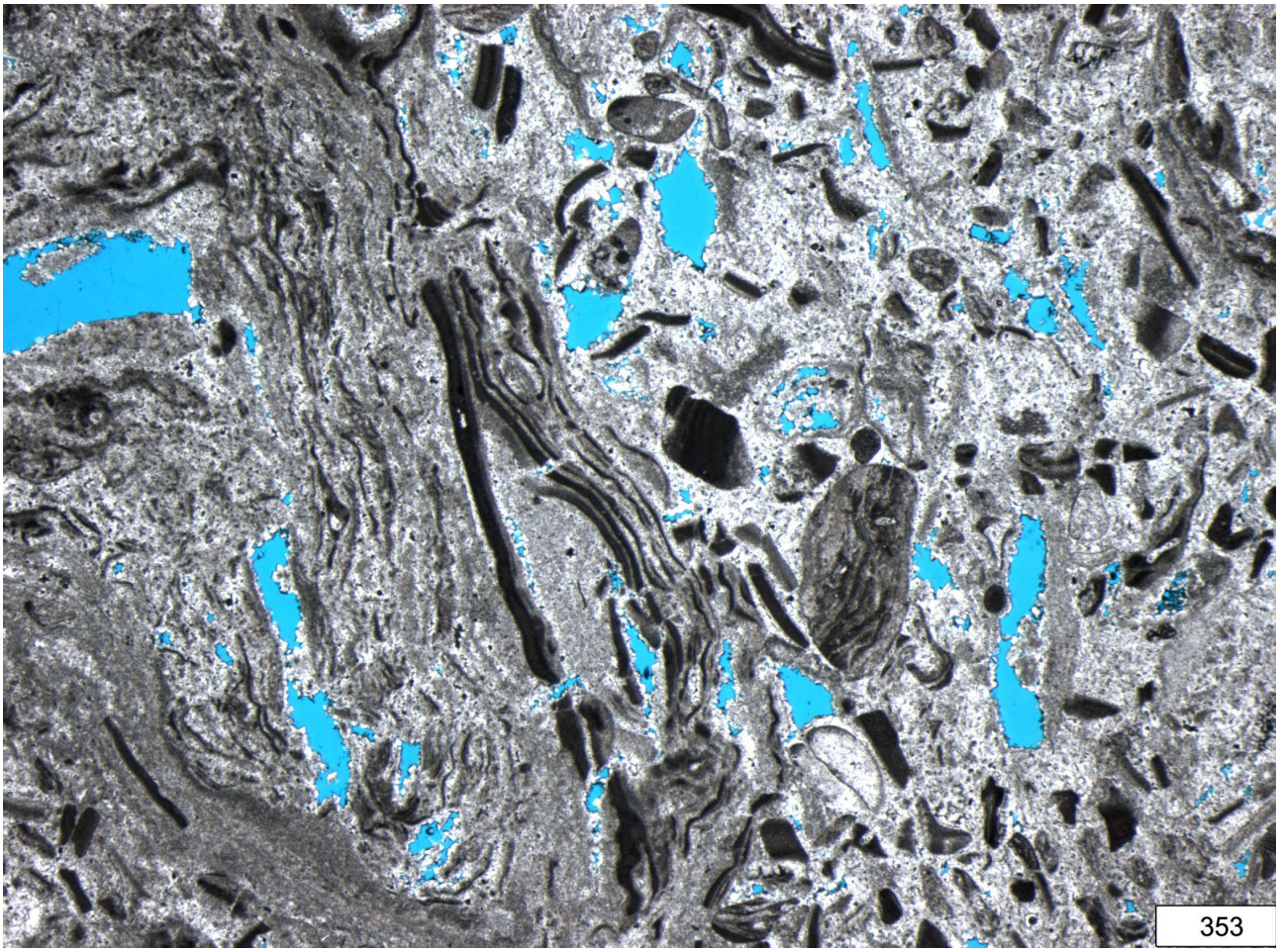

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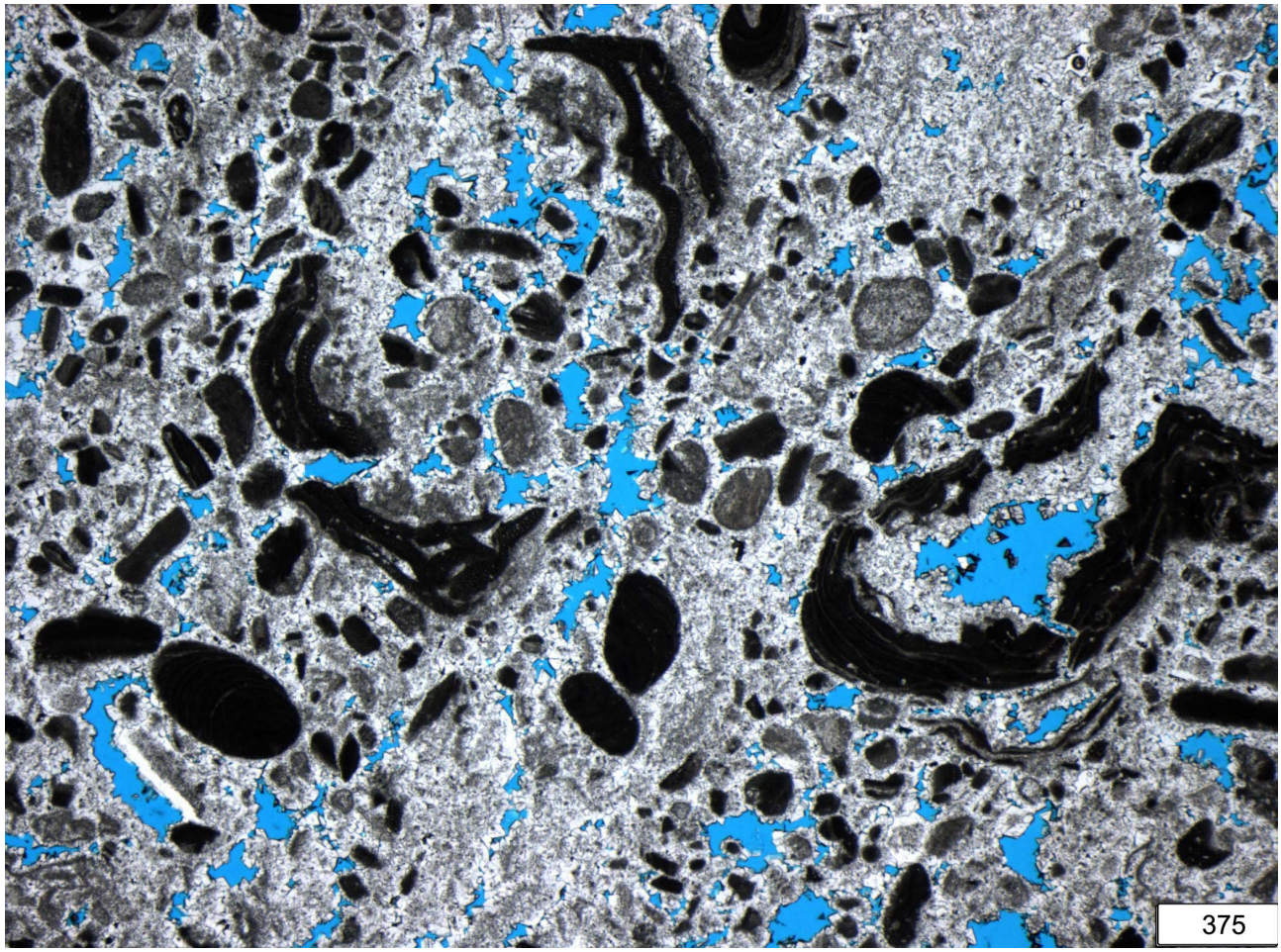

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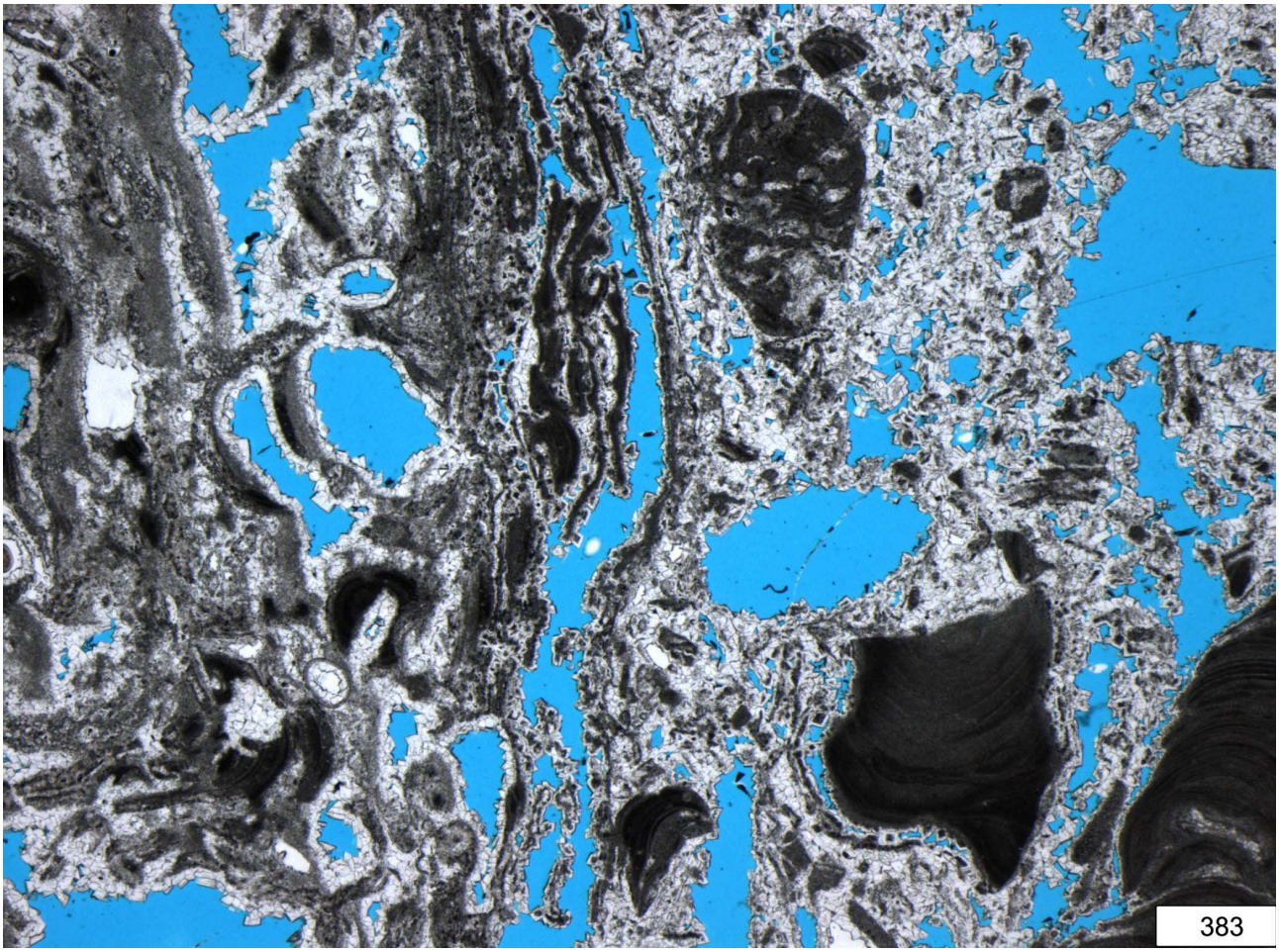

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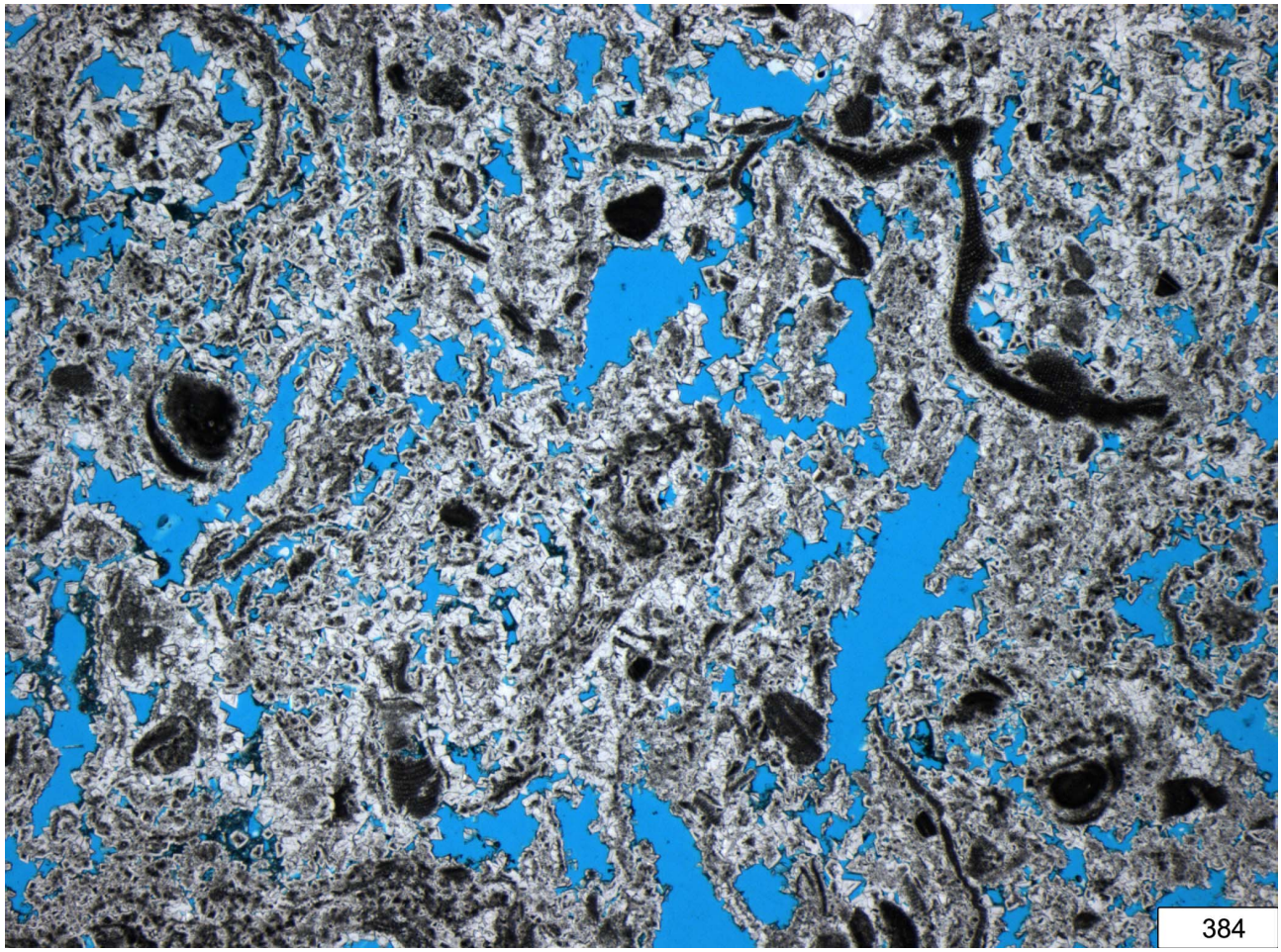

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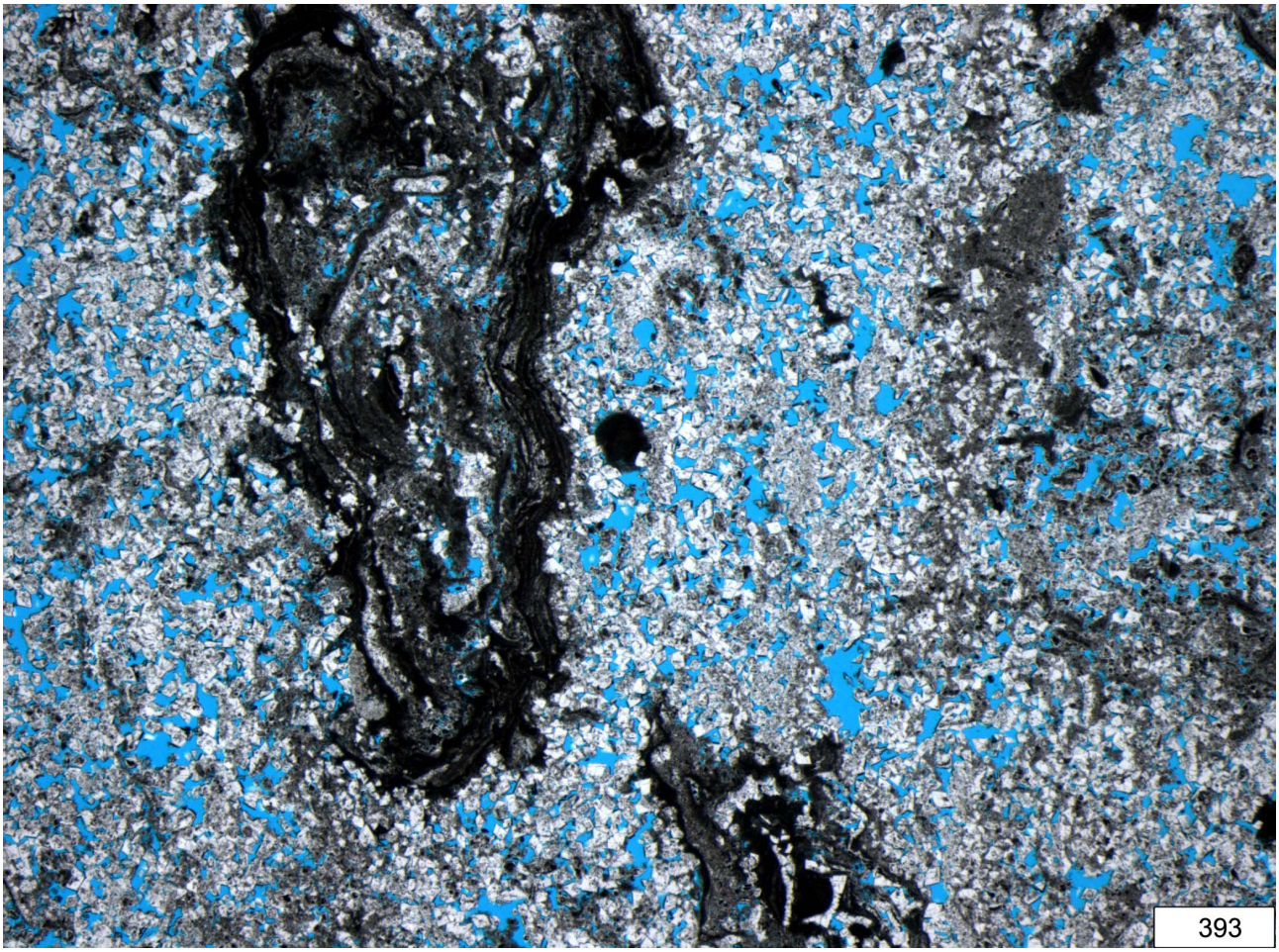

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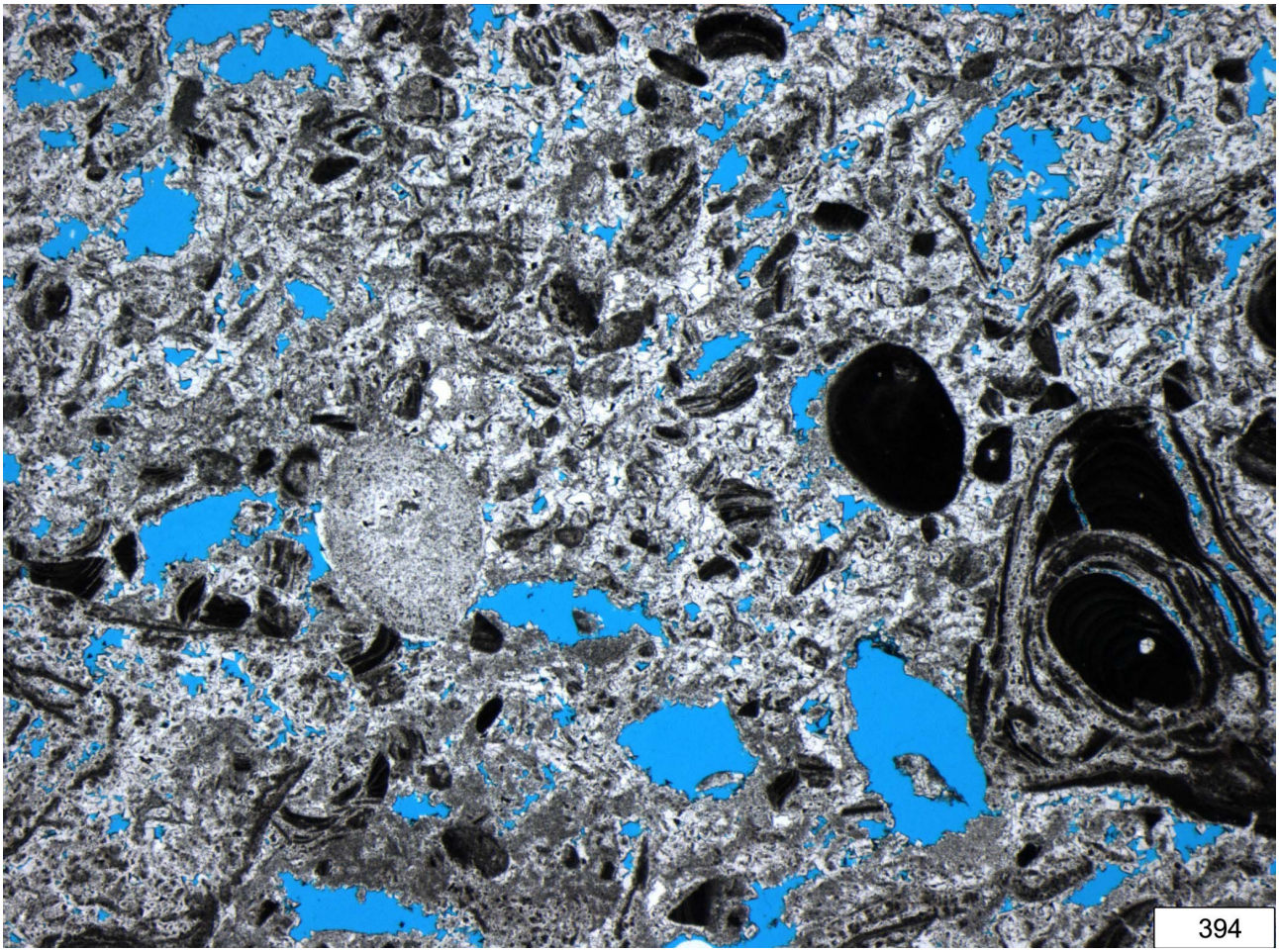

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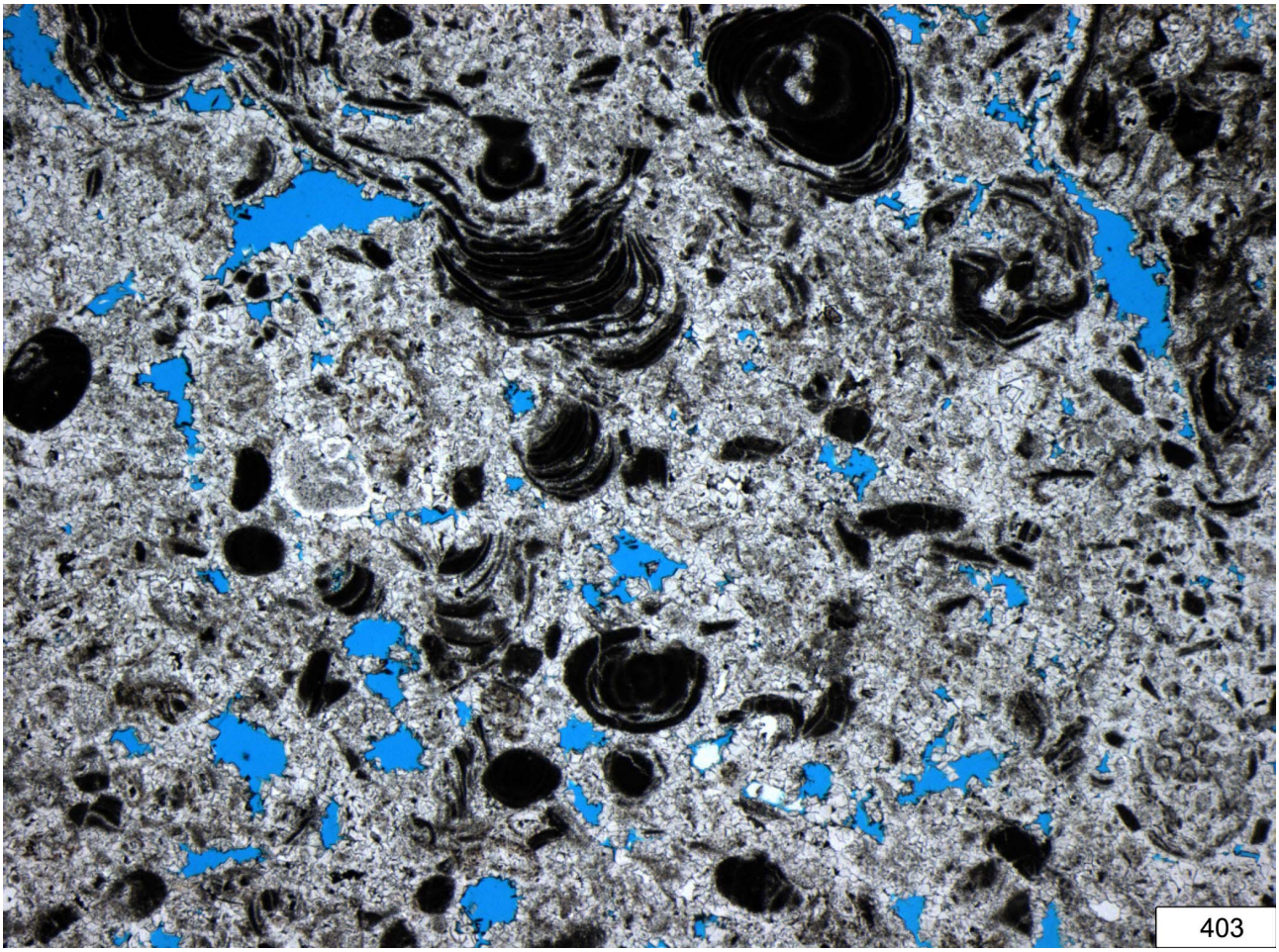

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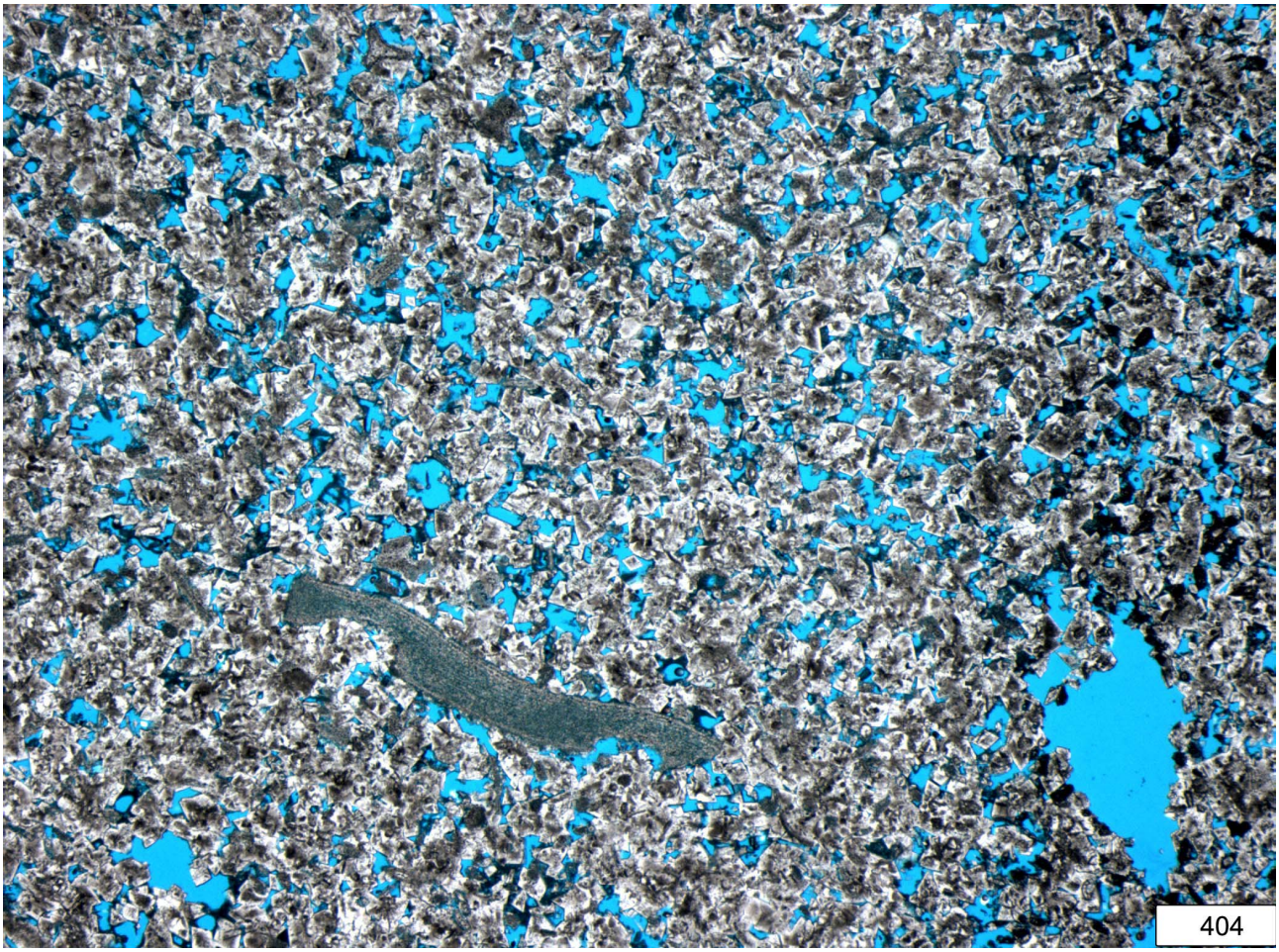

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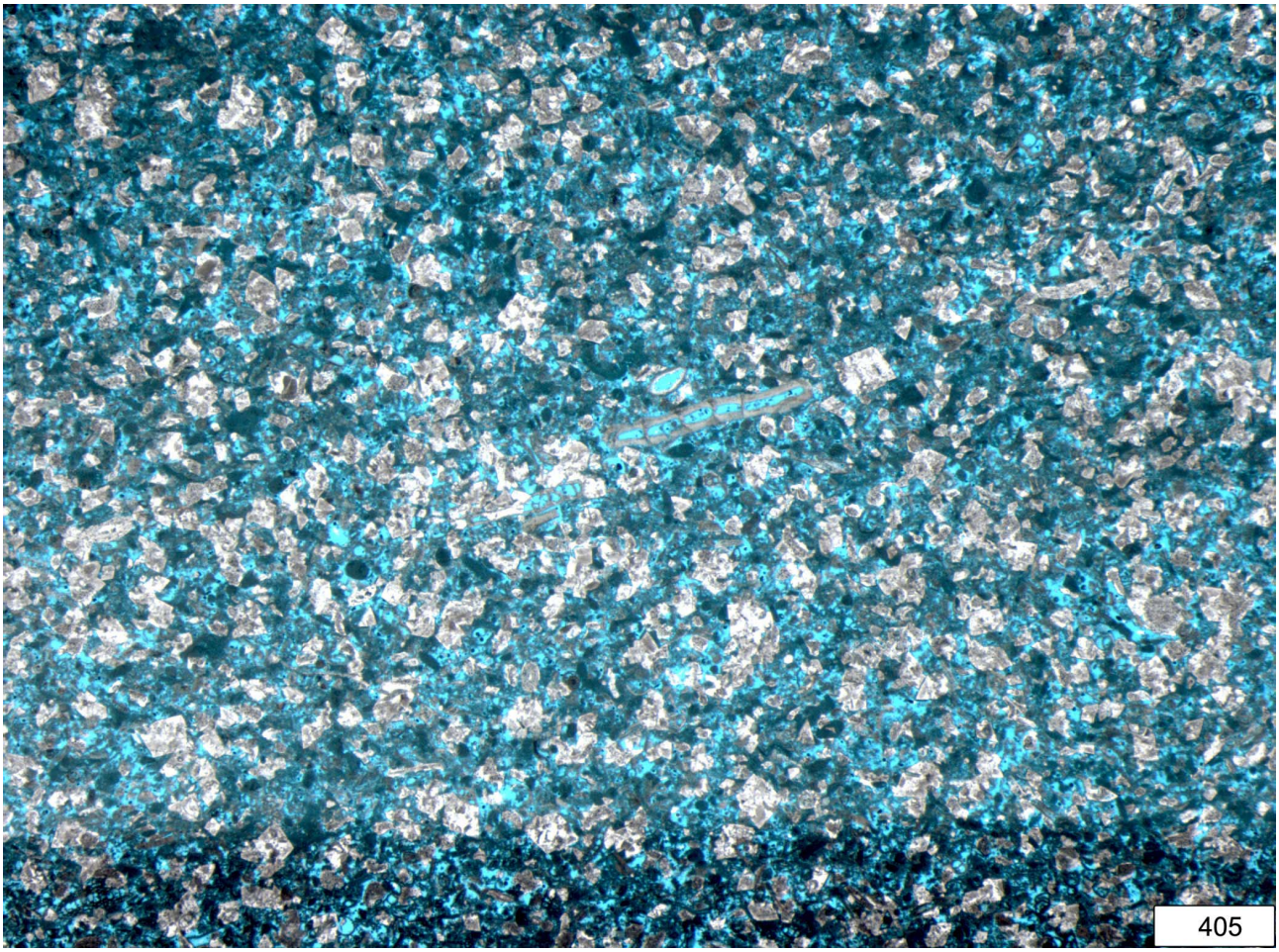

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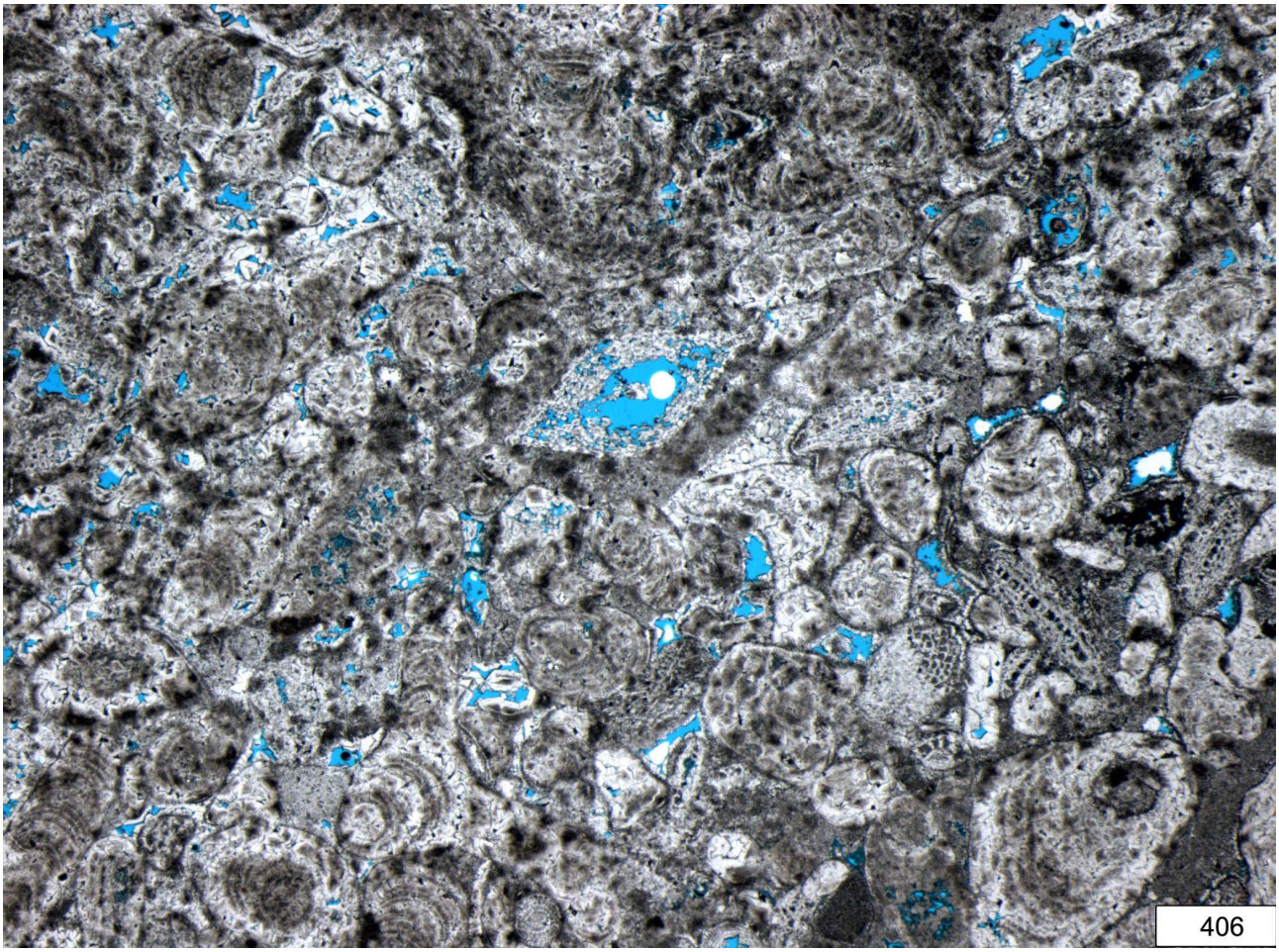

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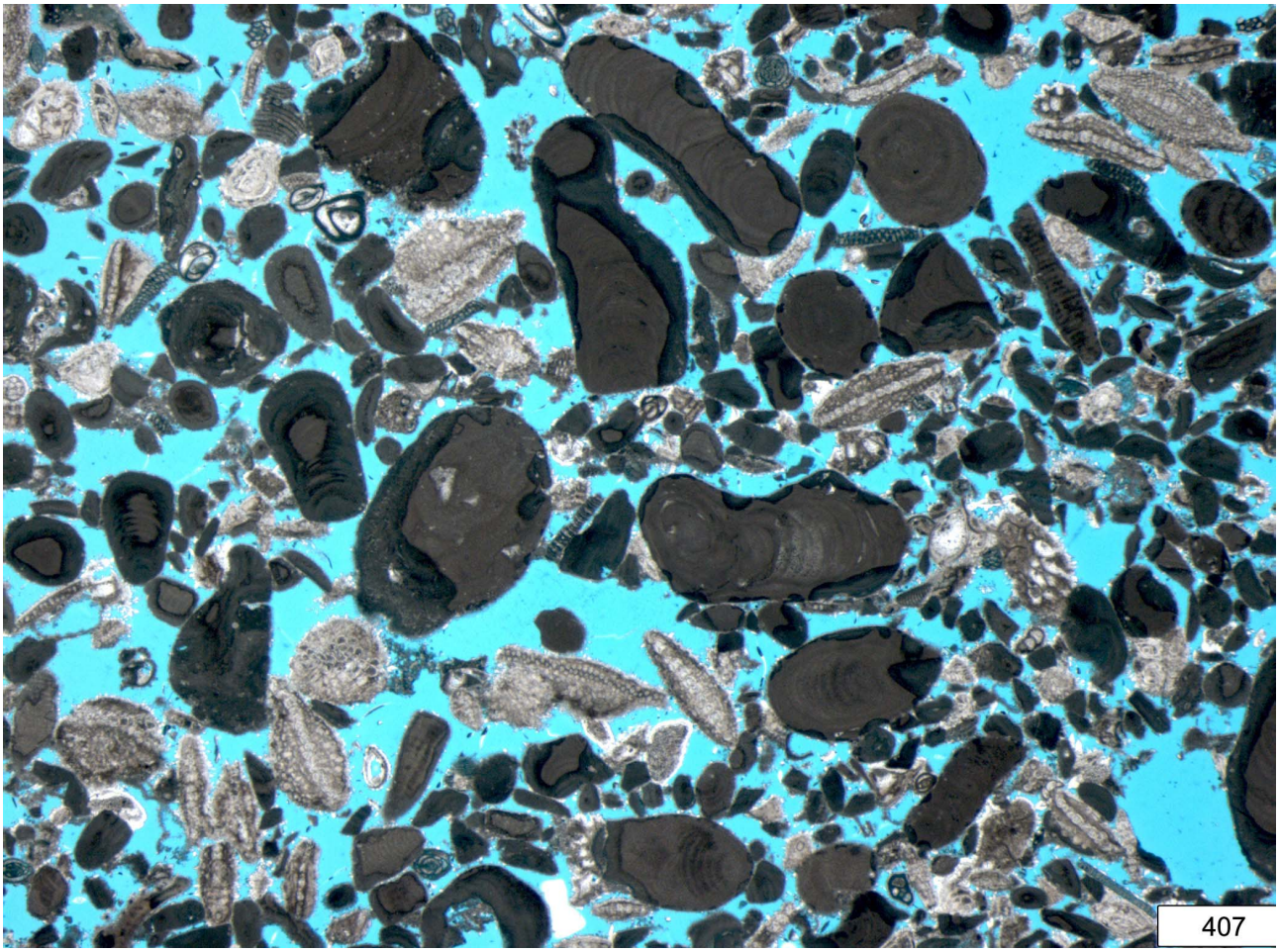

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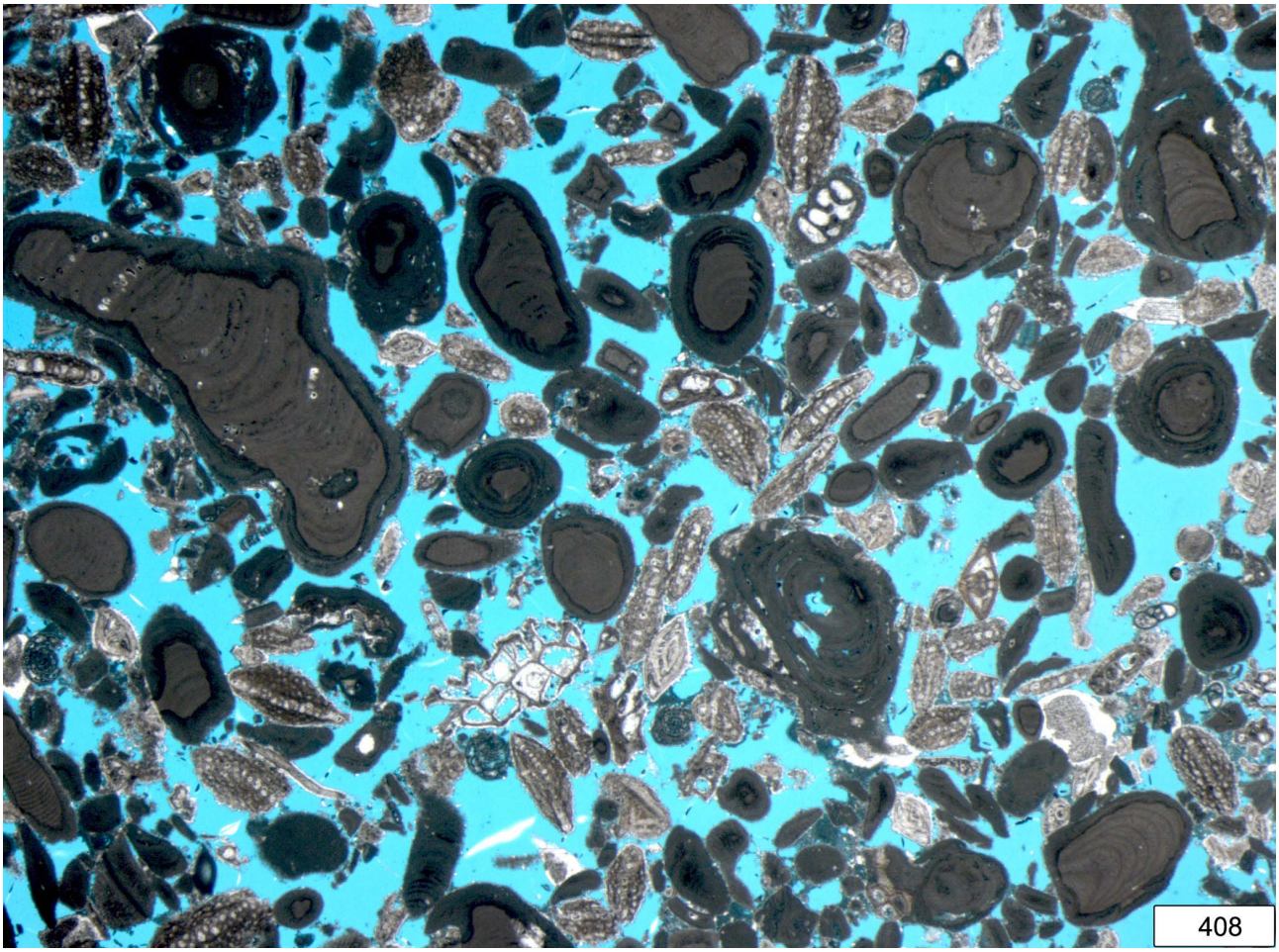

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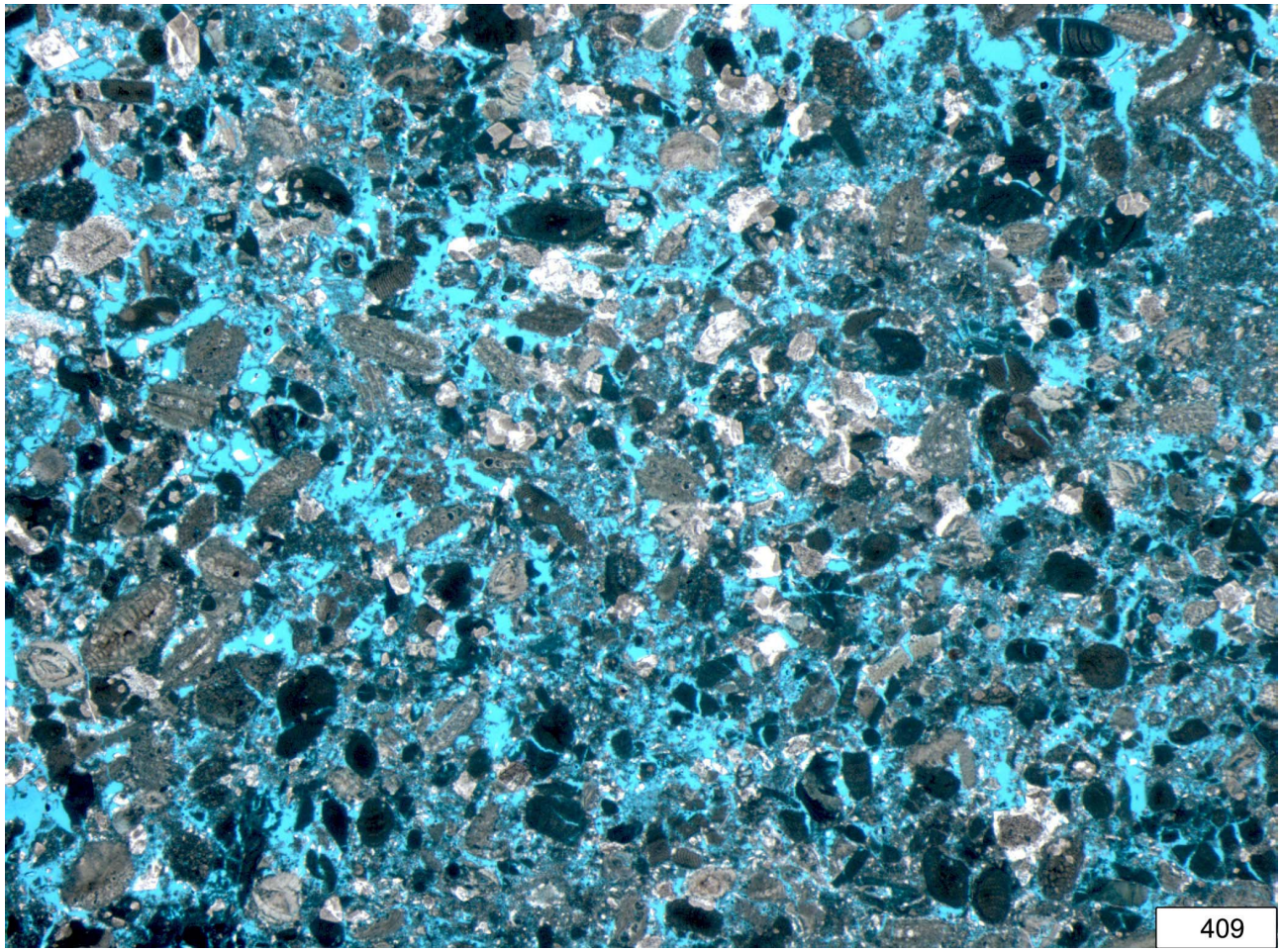

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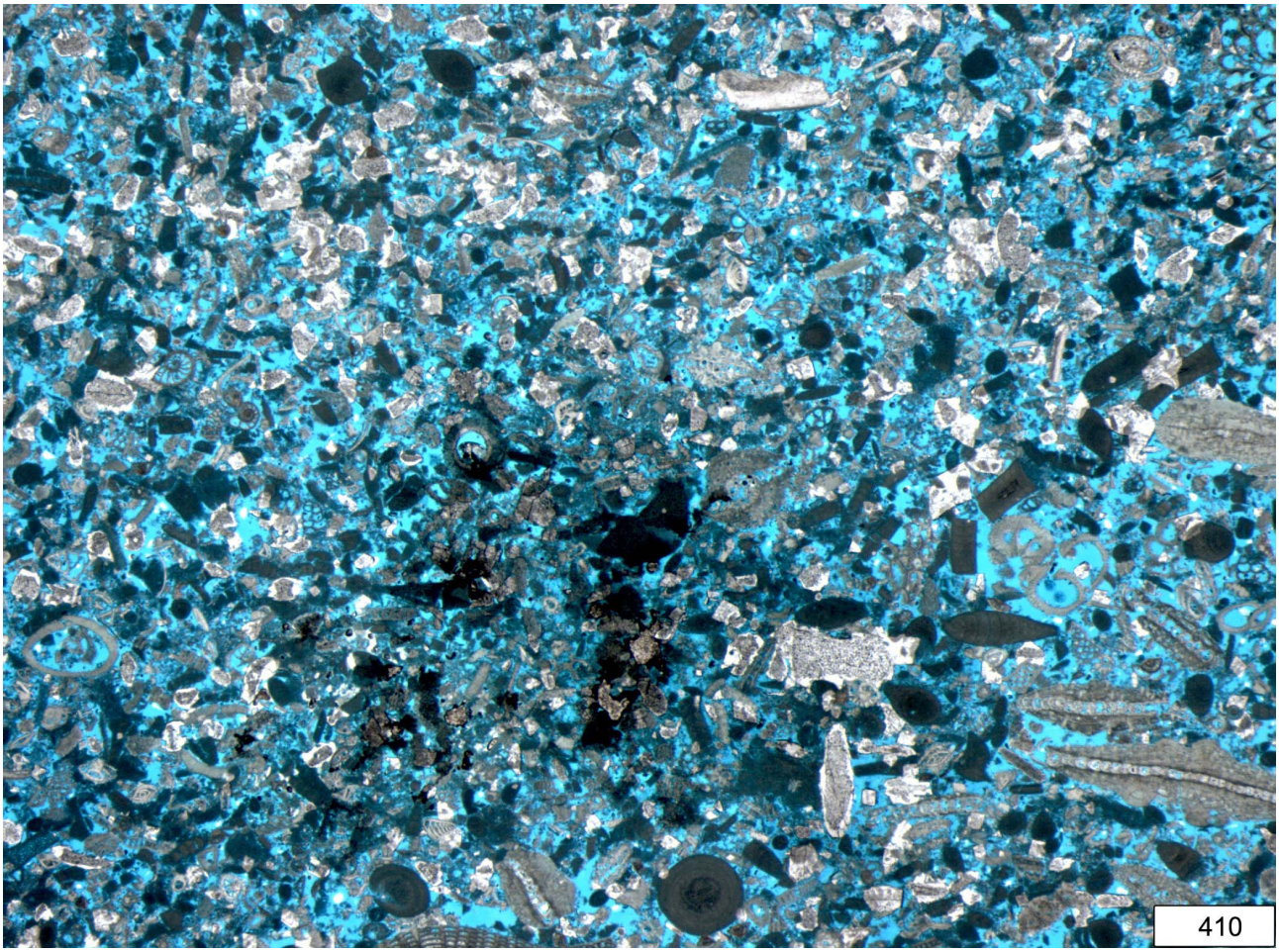

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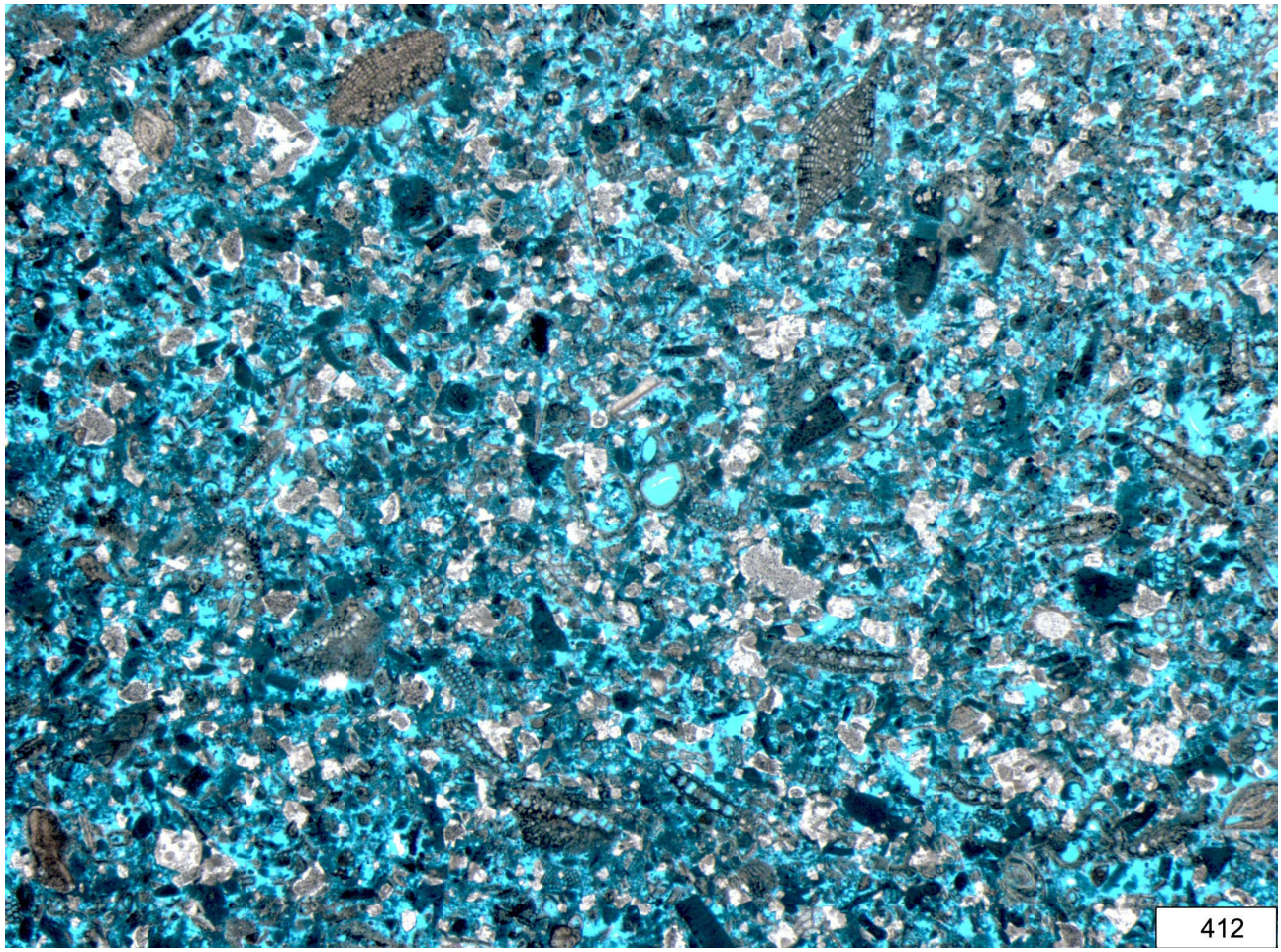

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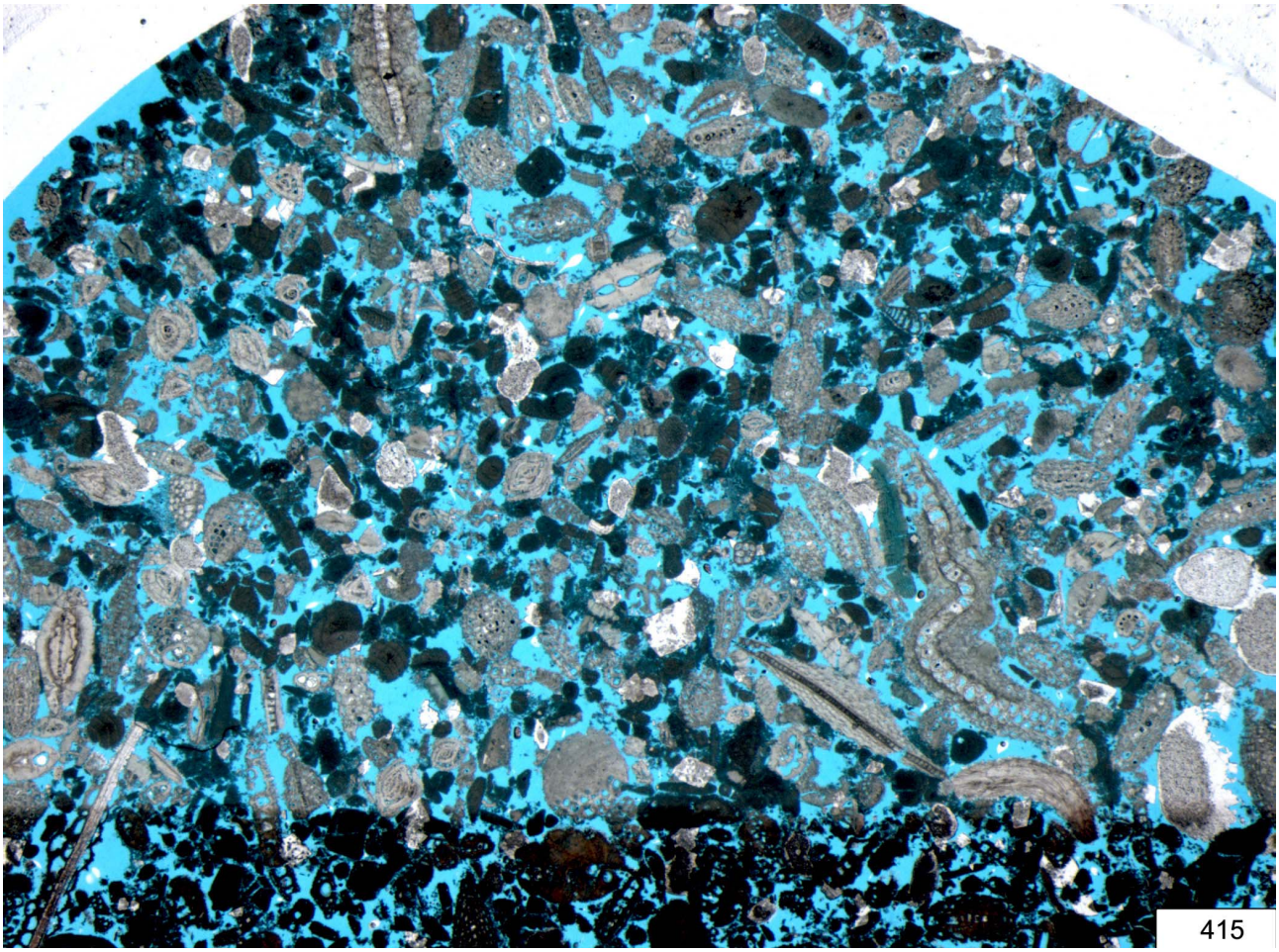
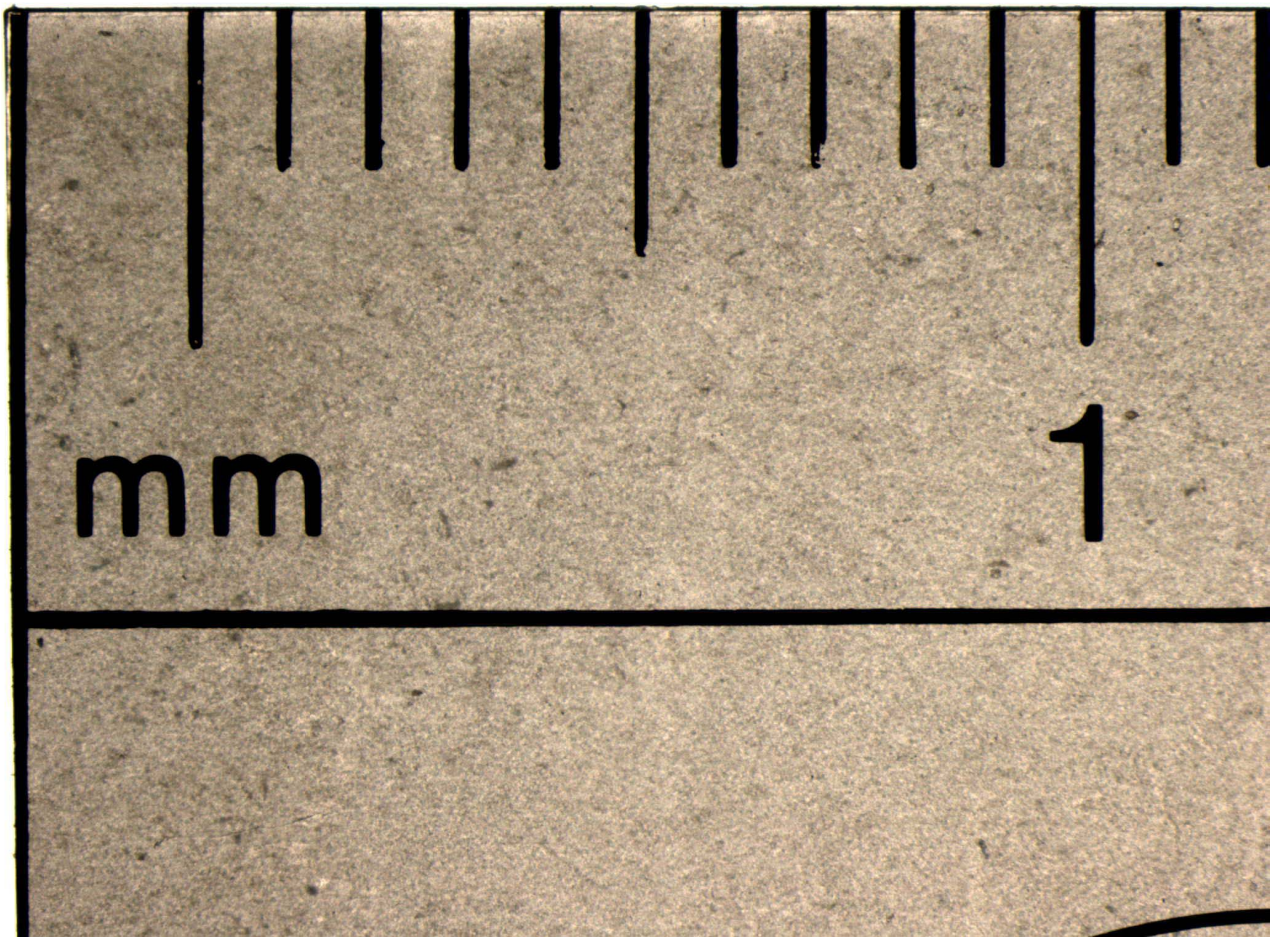


Plate AP2. Photomicrographs of whole-core samples. (Continued on next 46 pages.)



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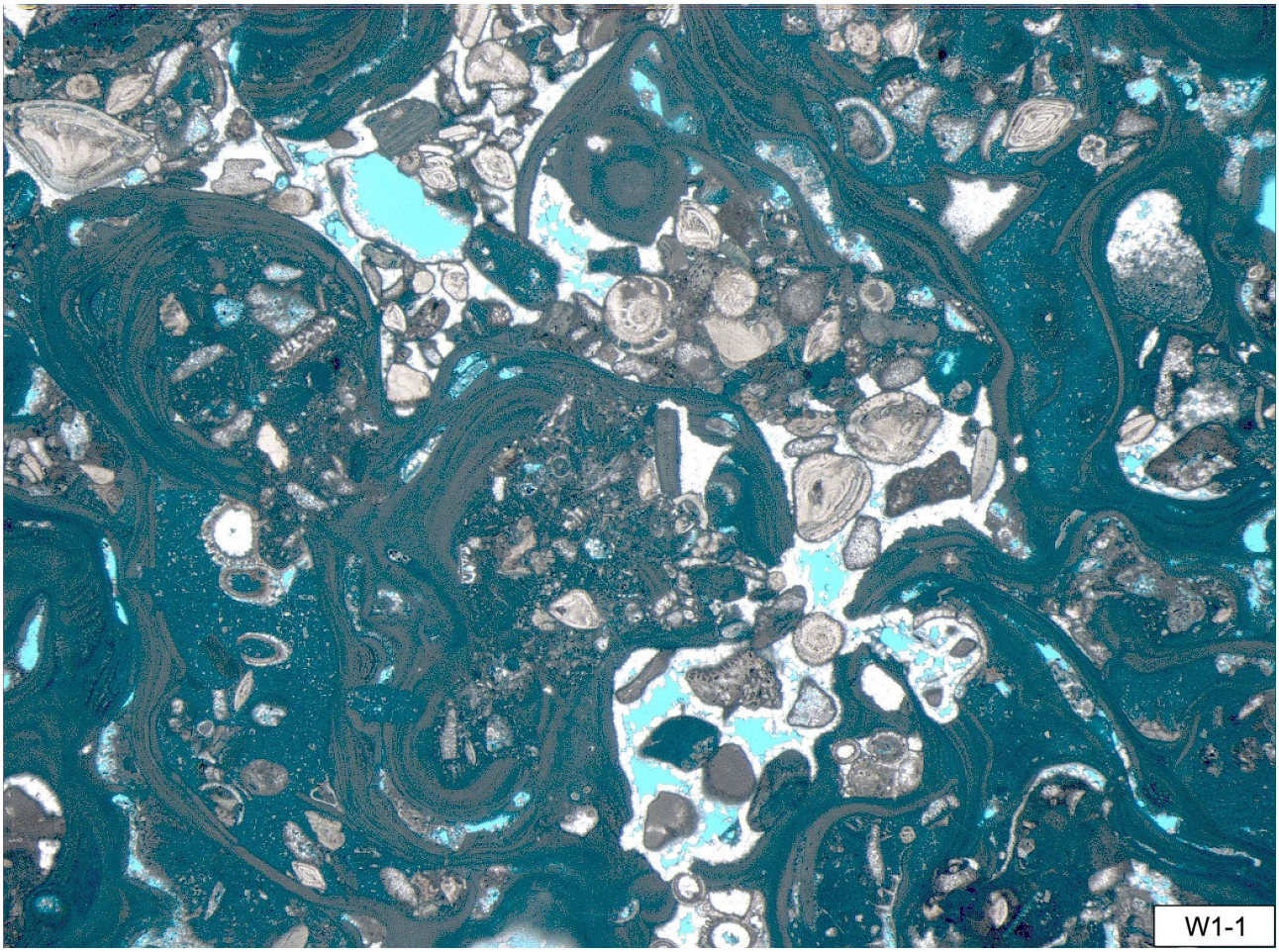

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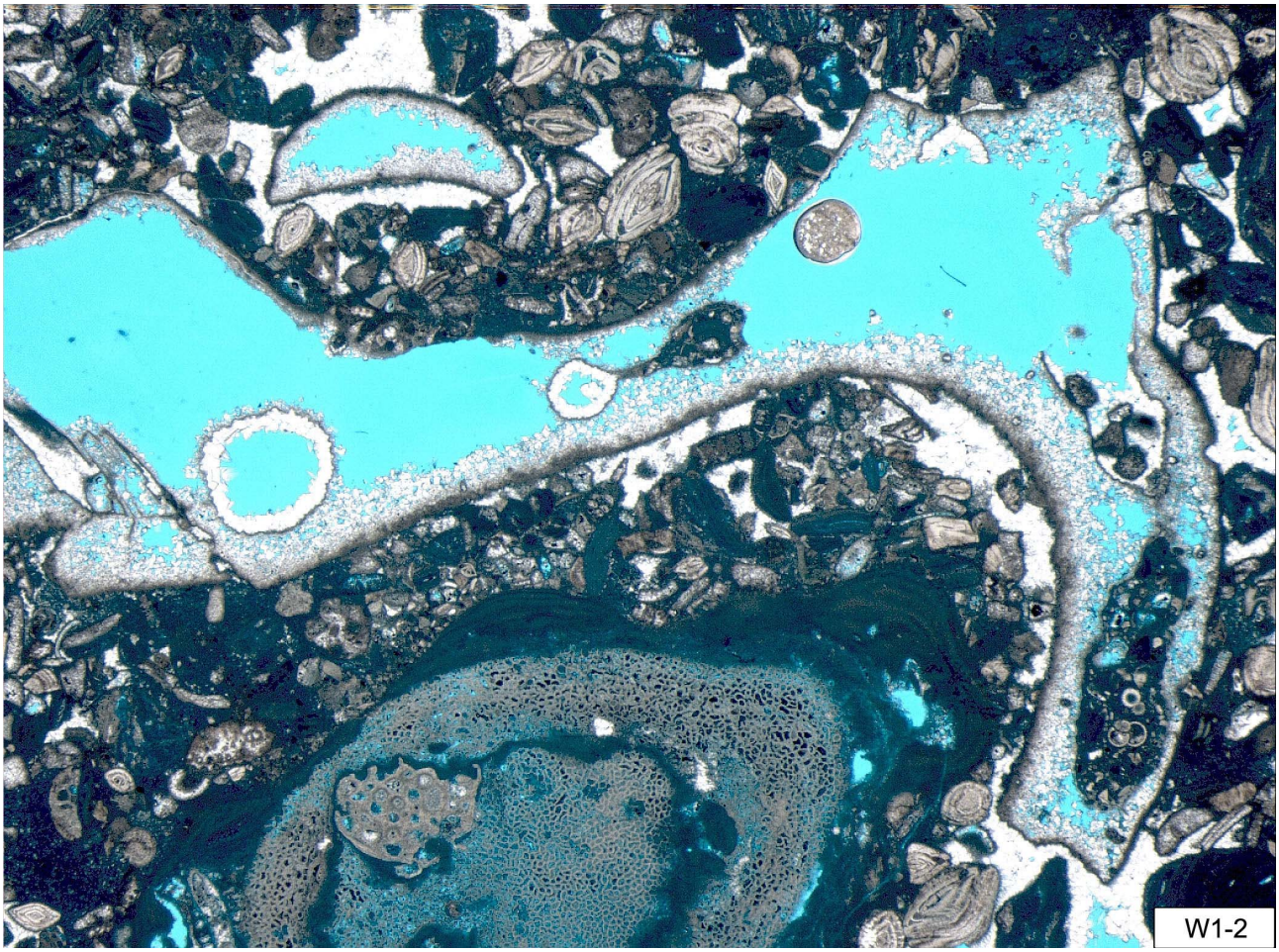

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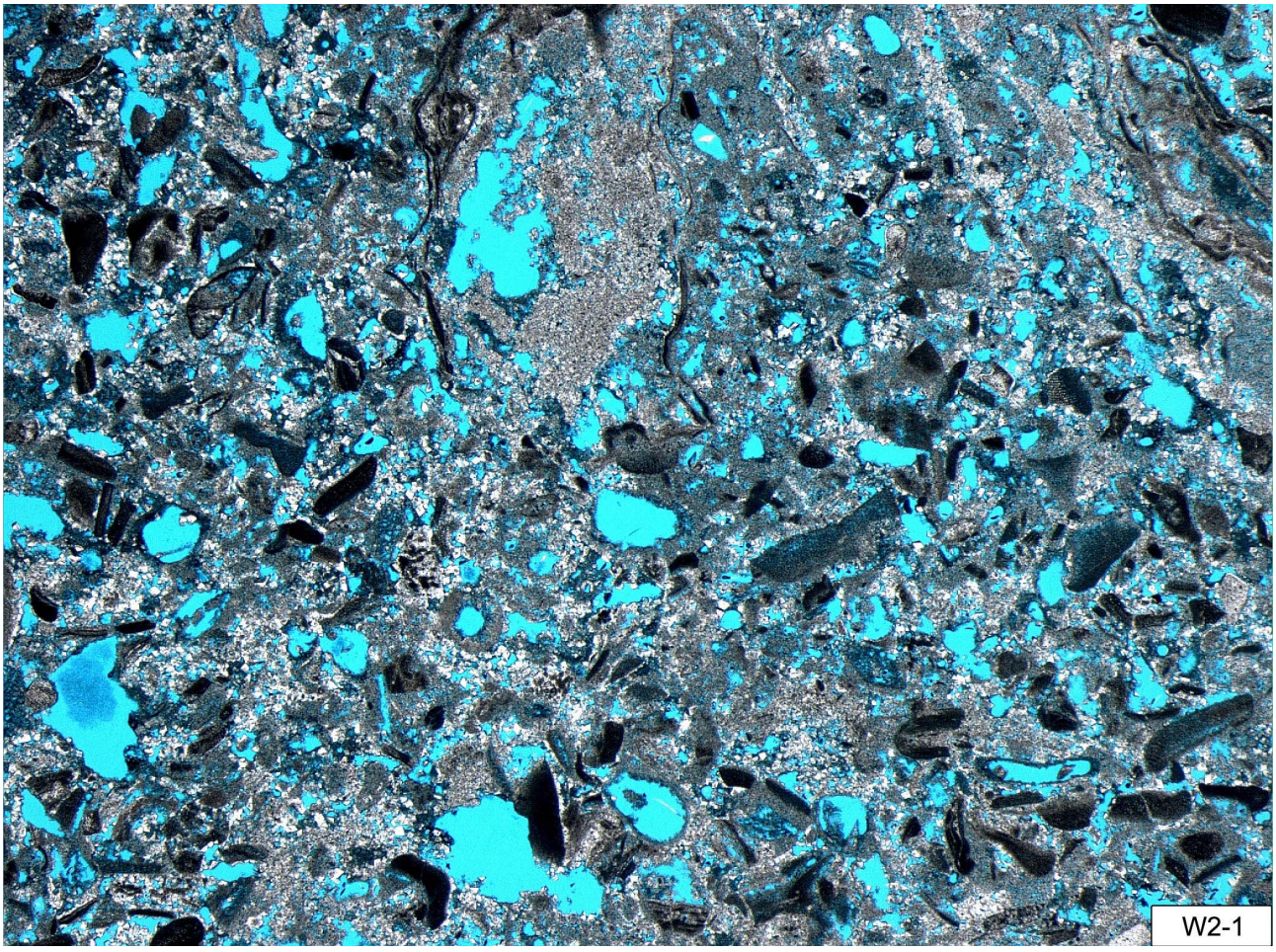

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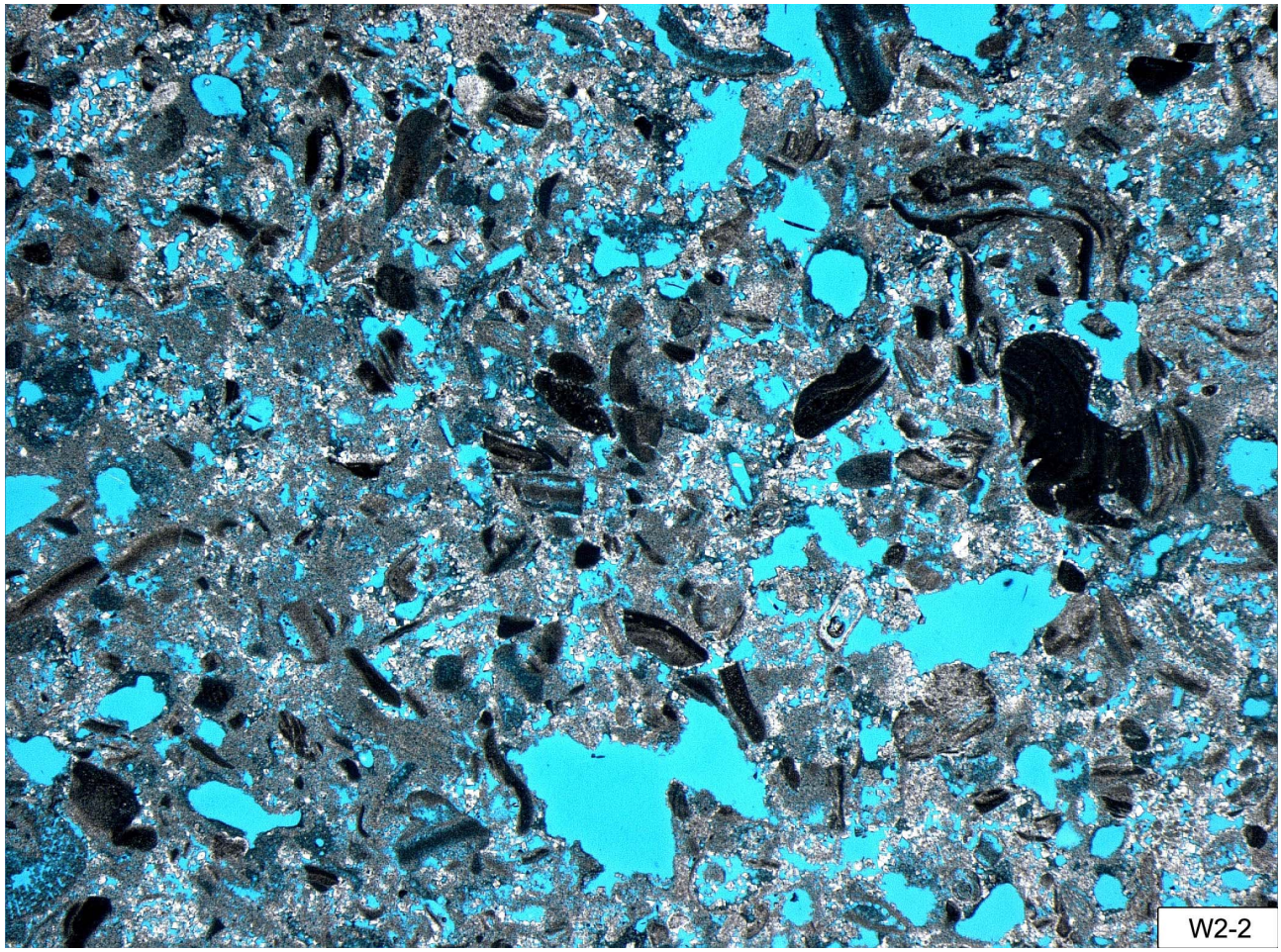

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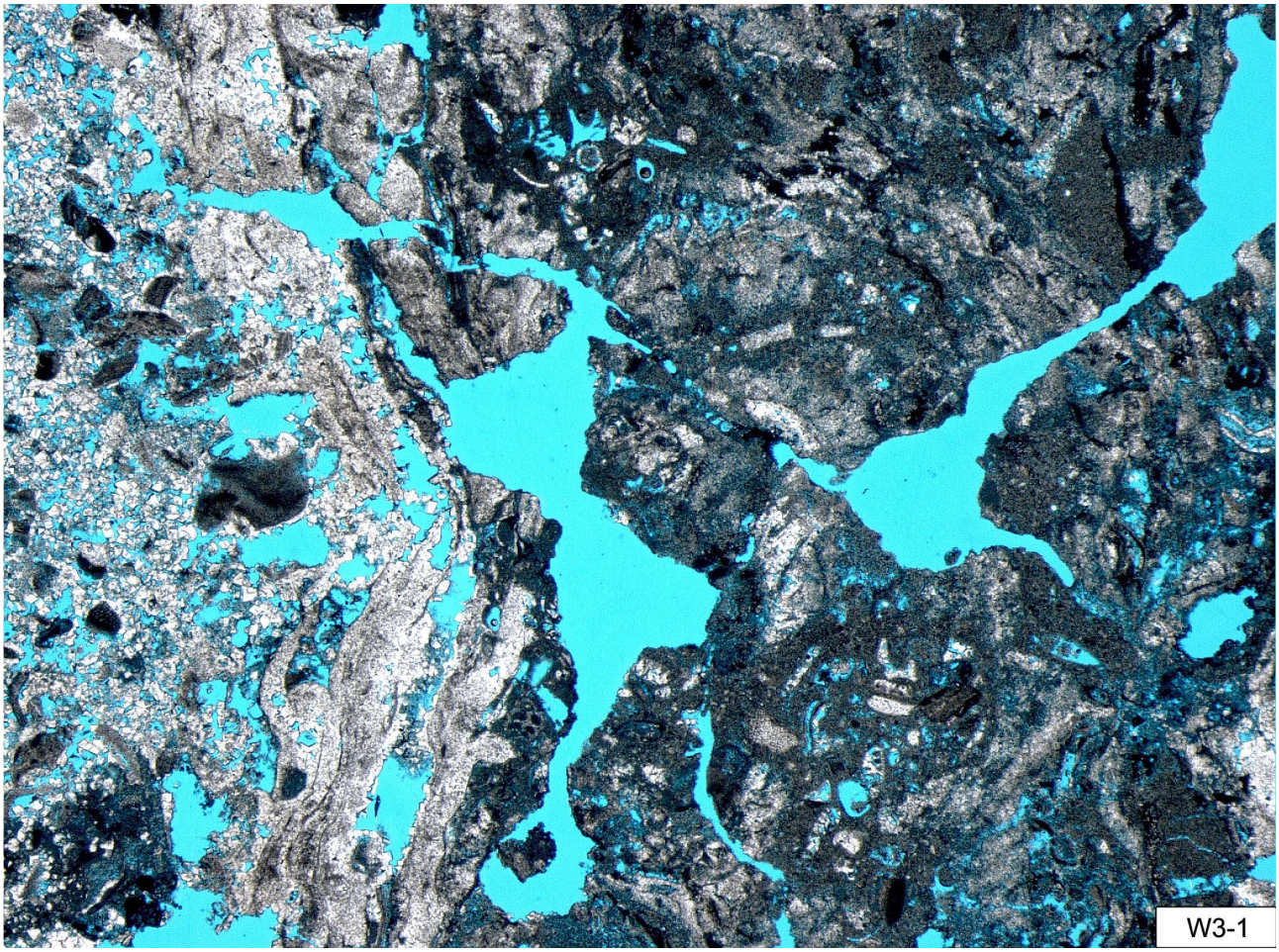

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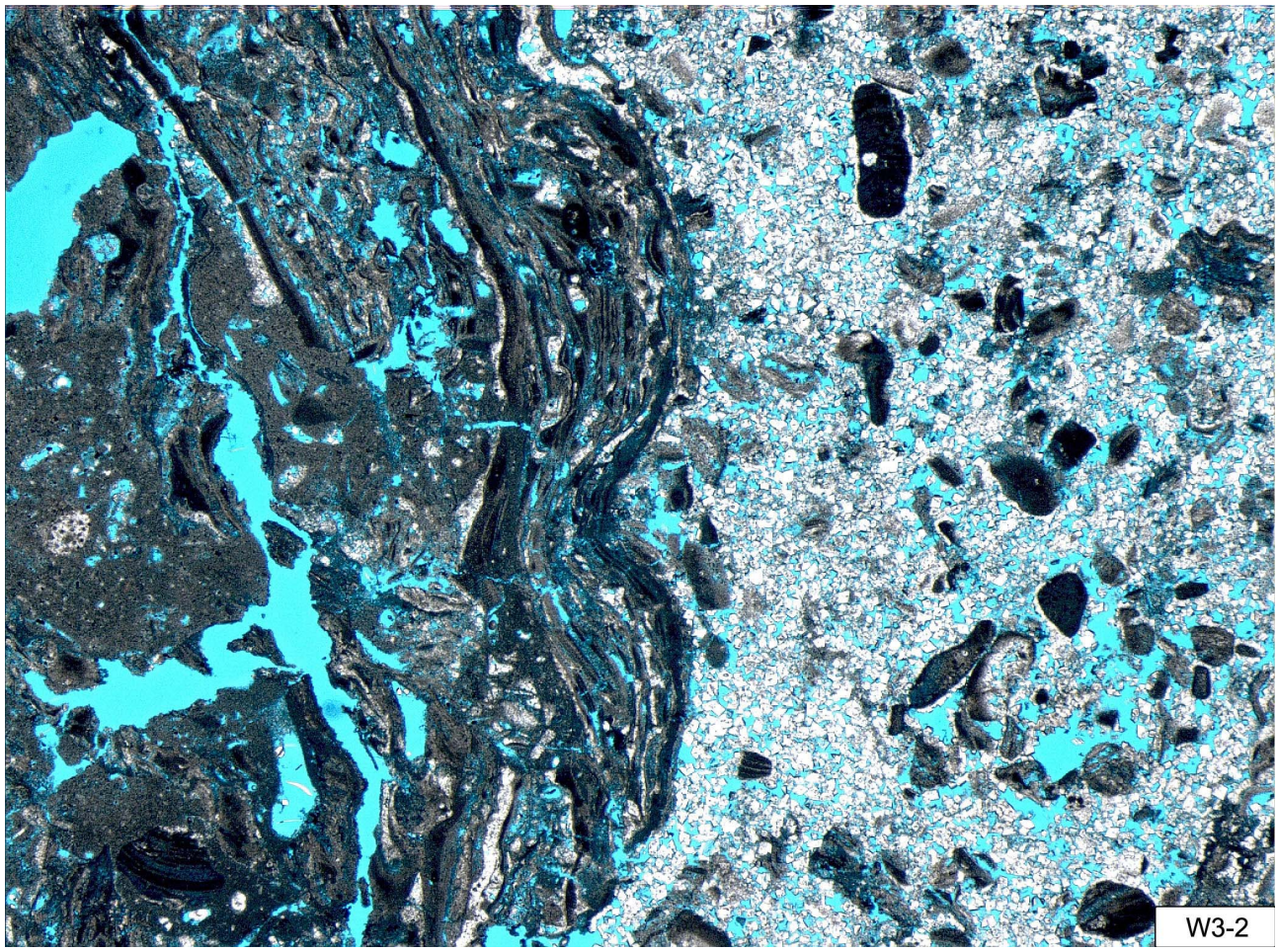

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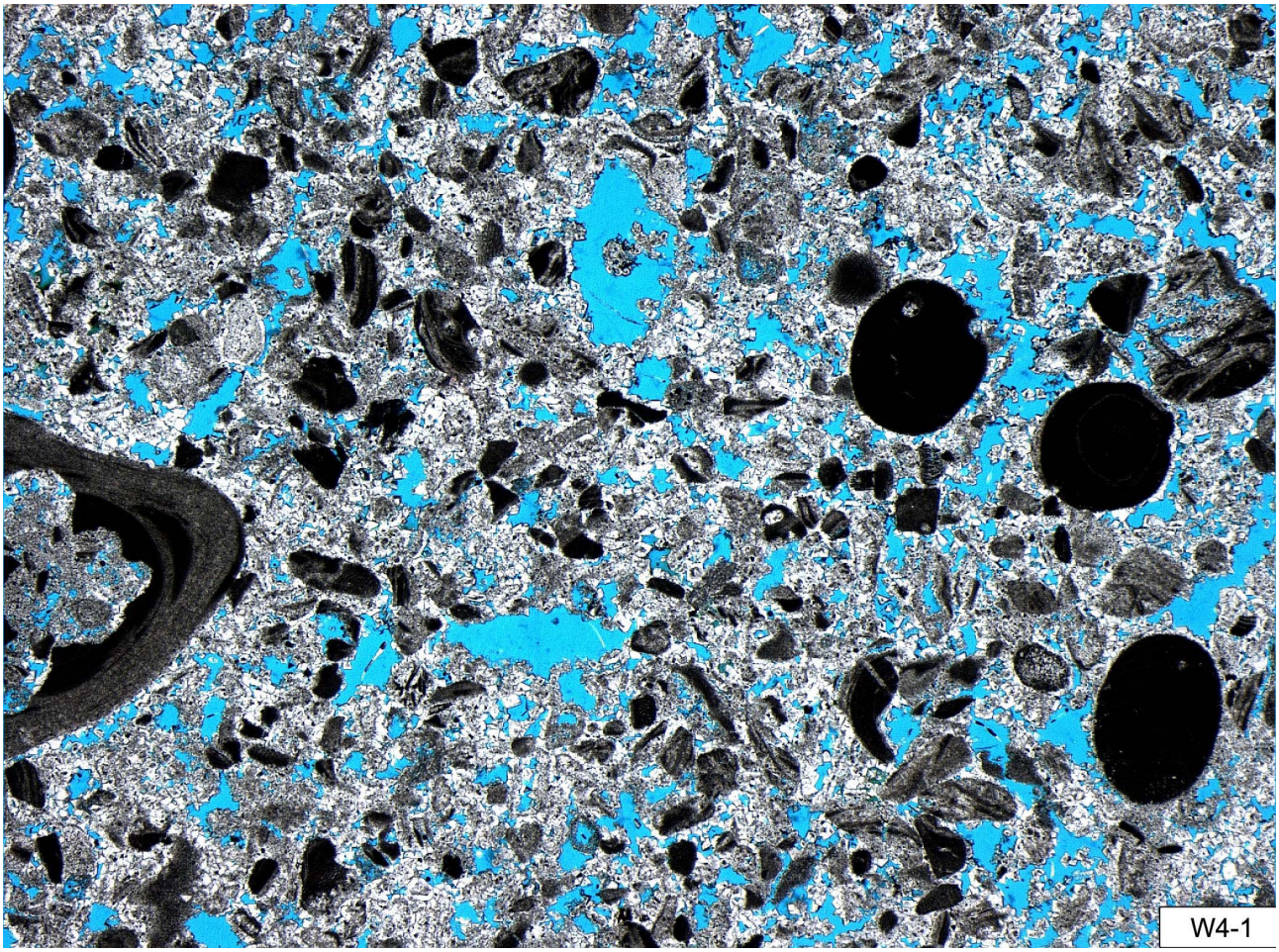

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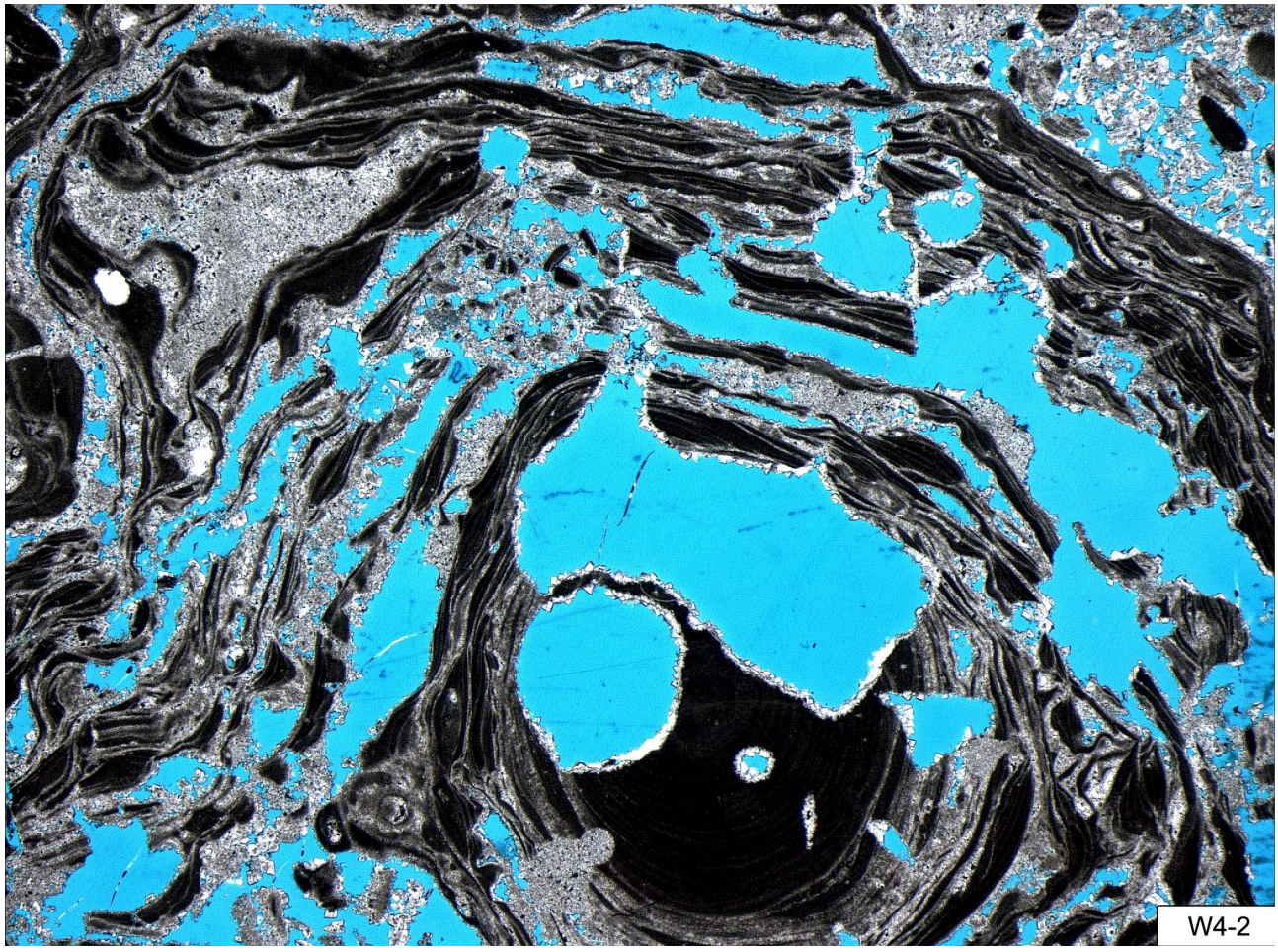

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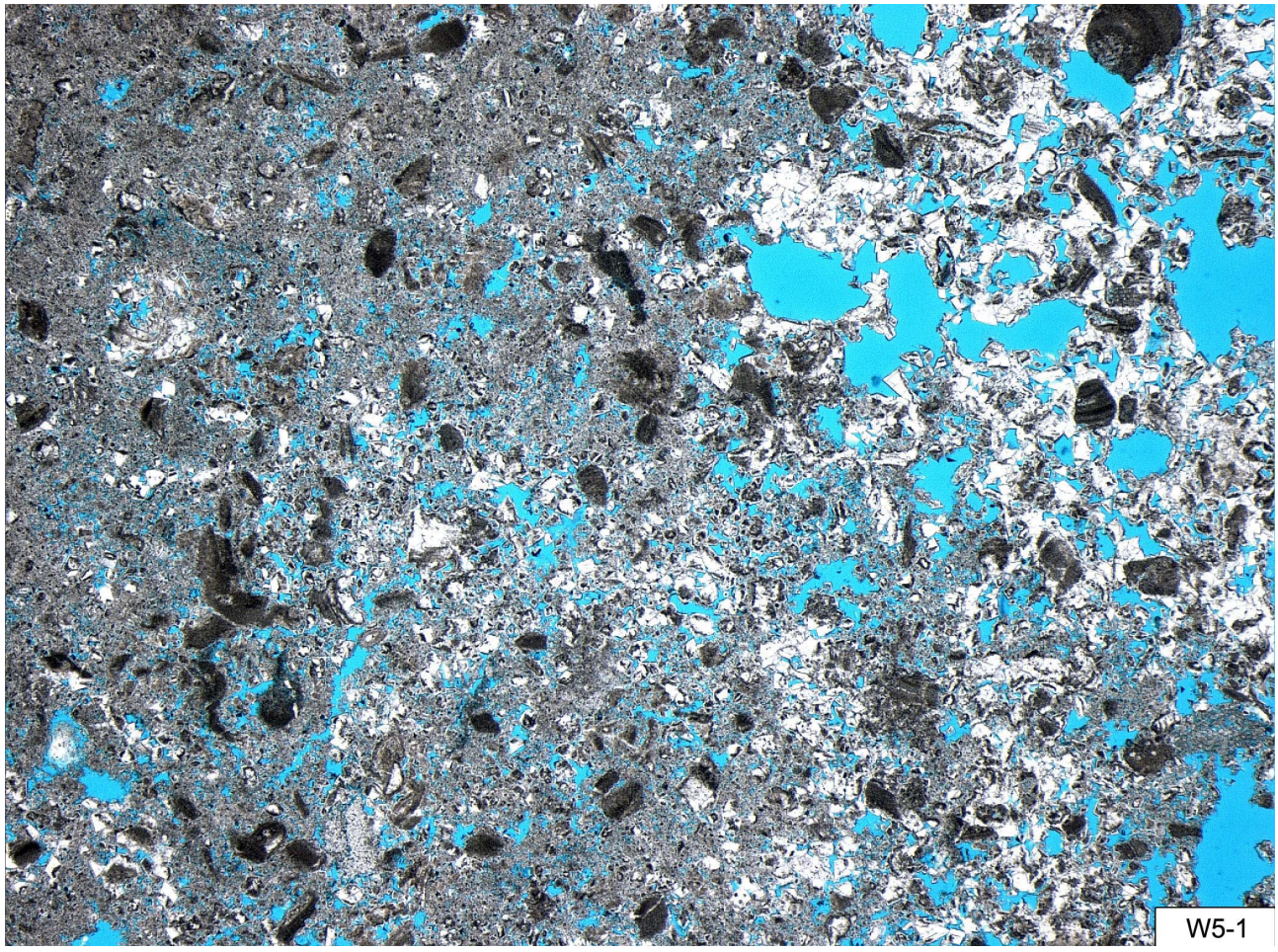

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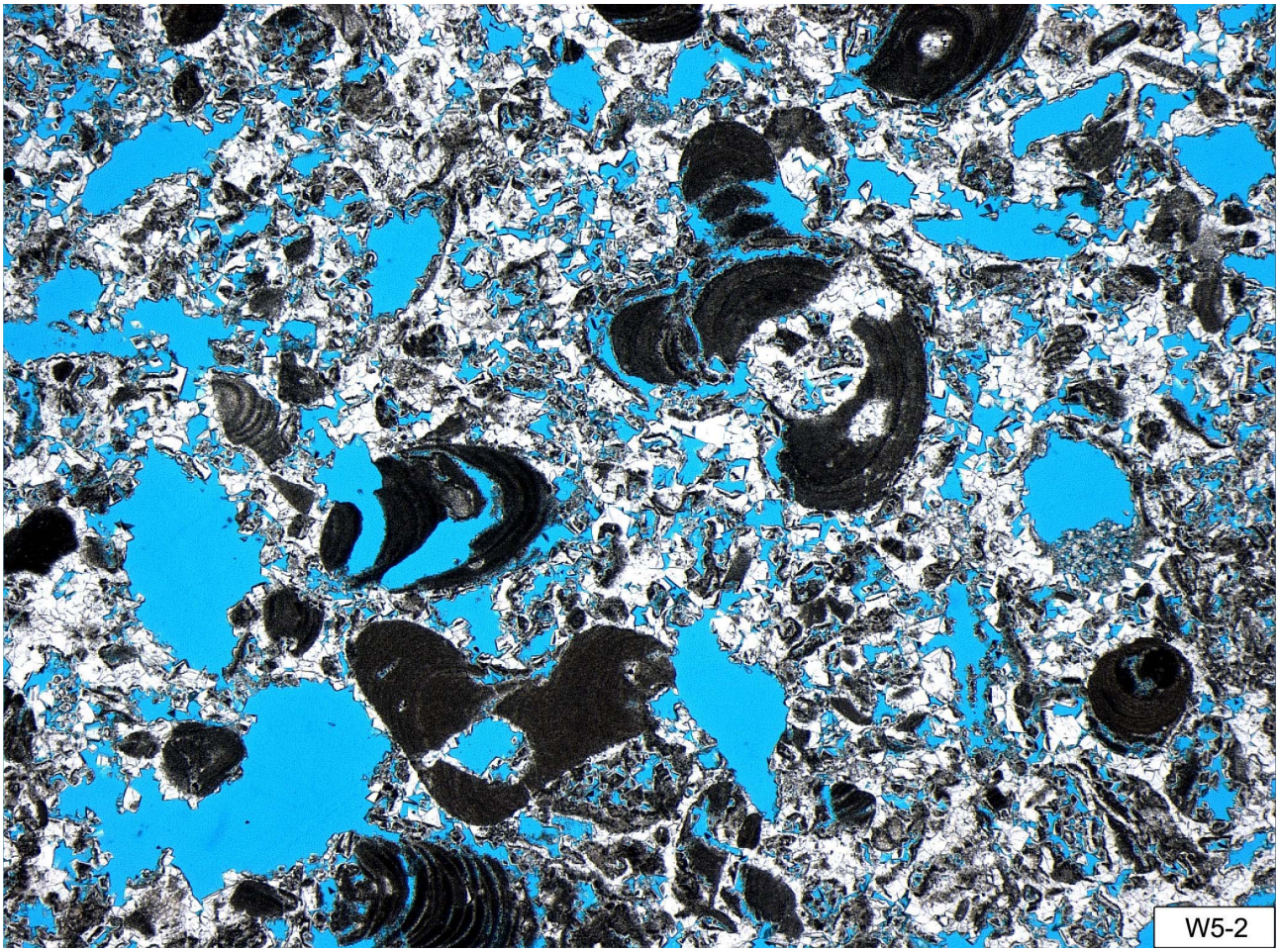

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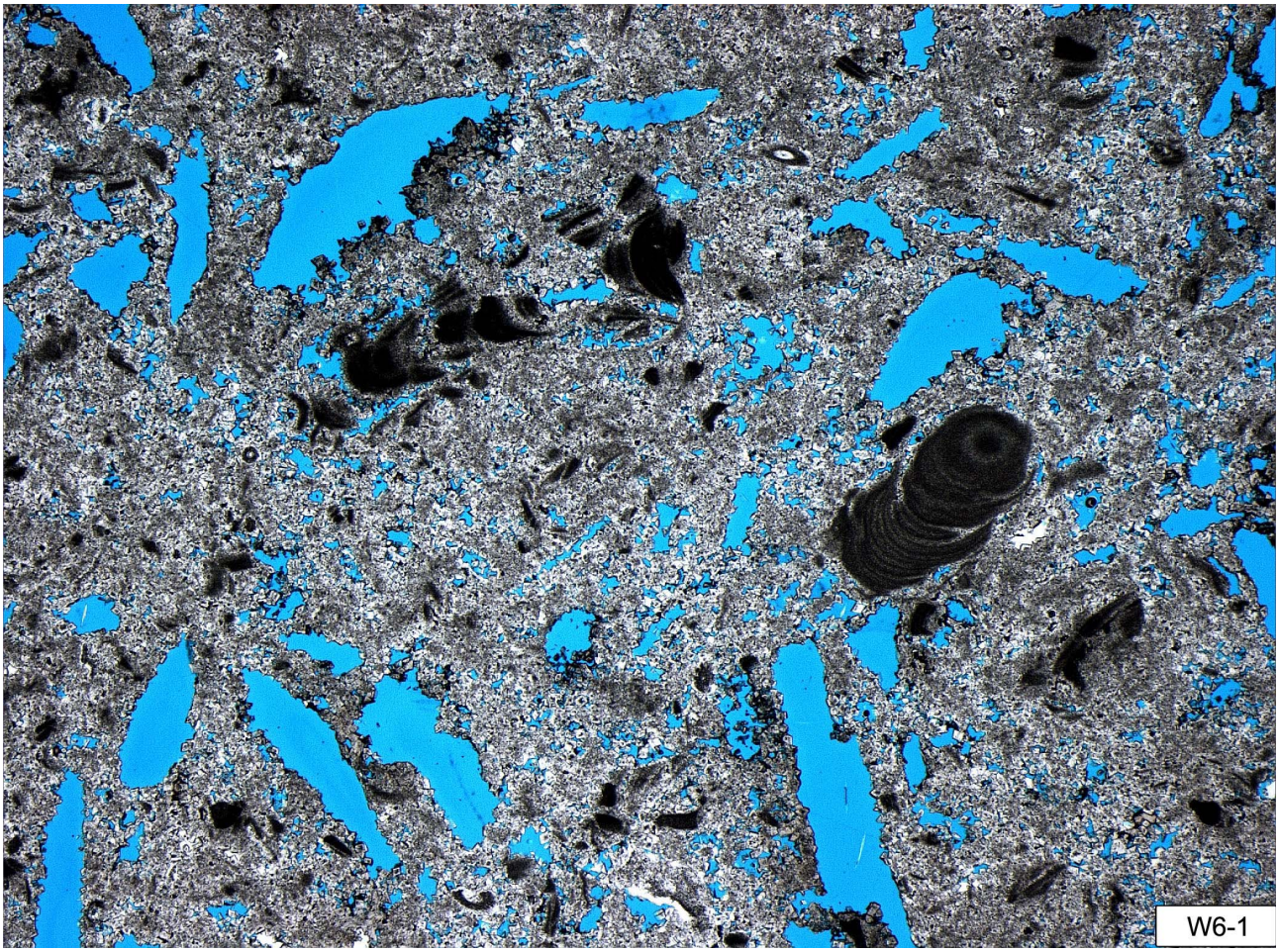

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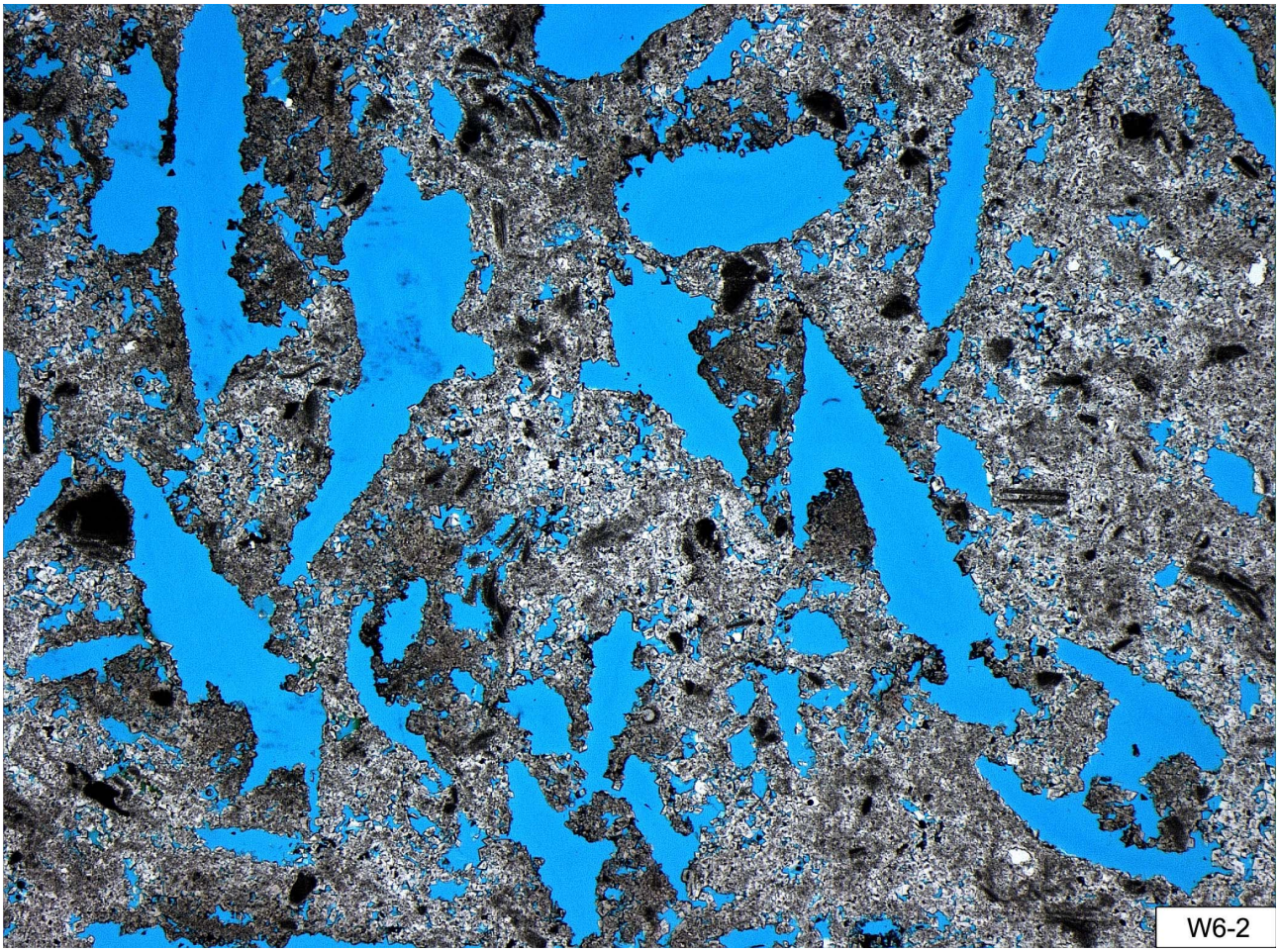

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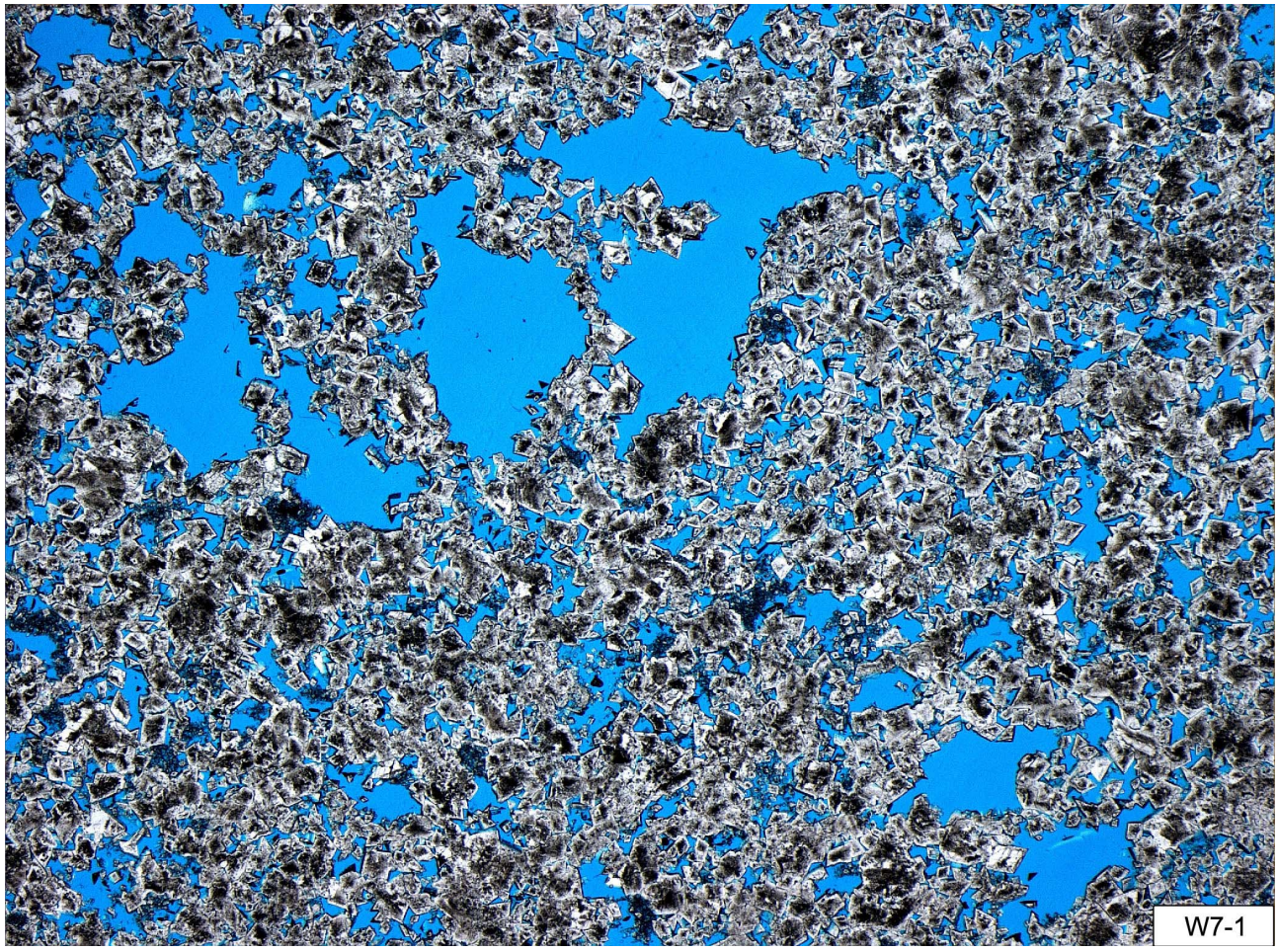

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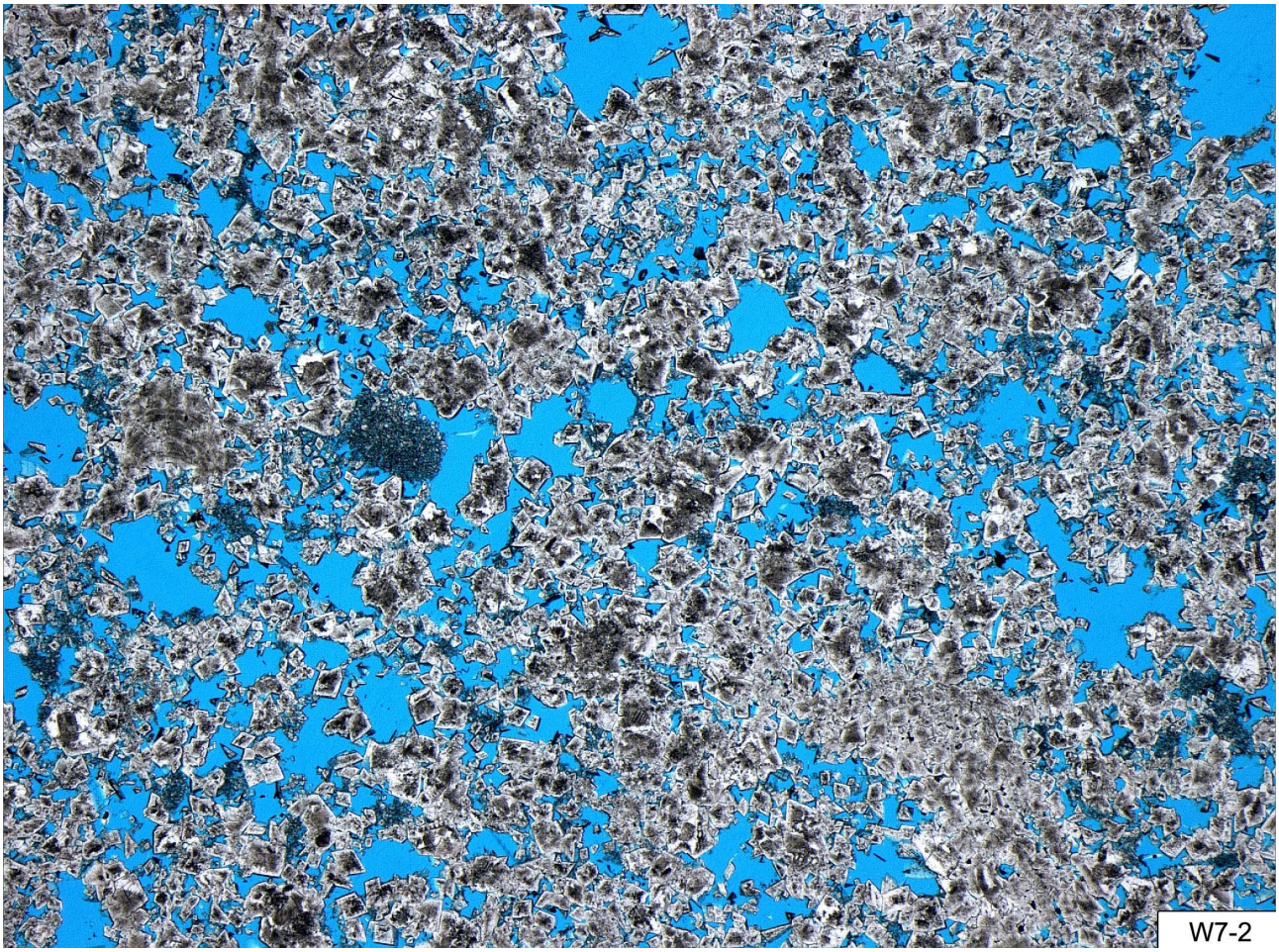

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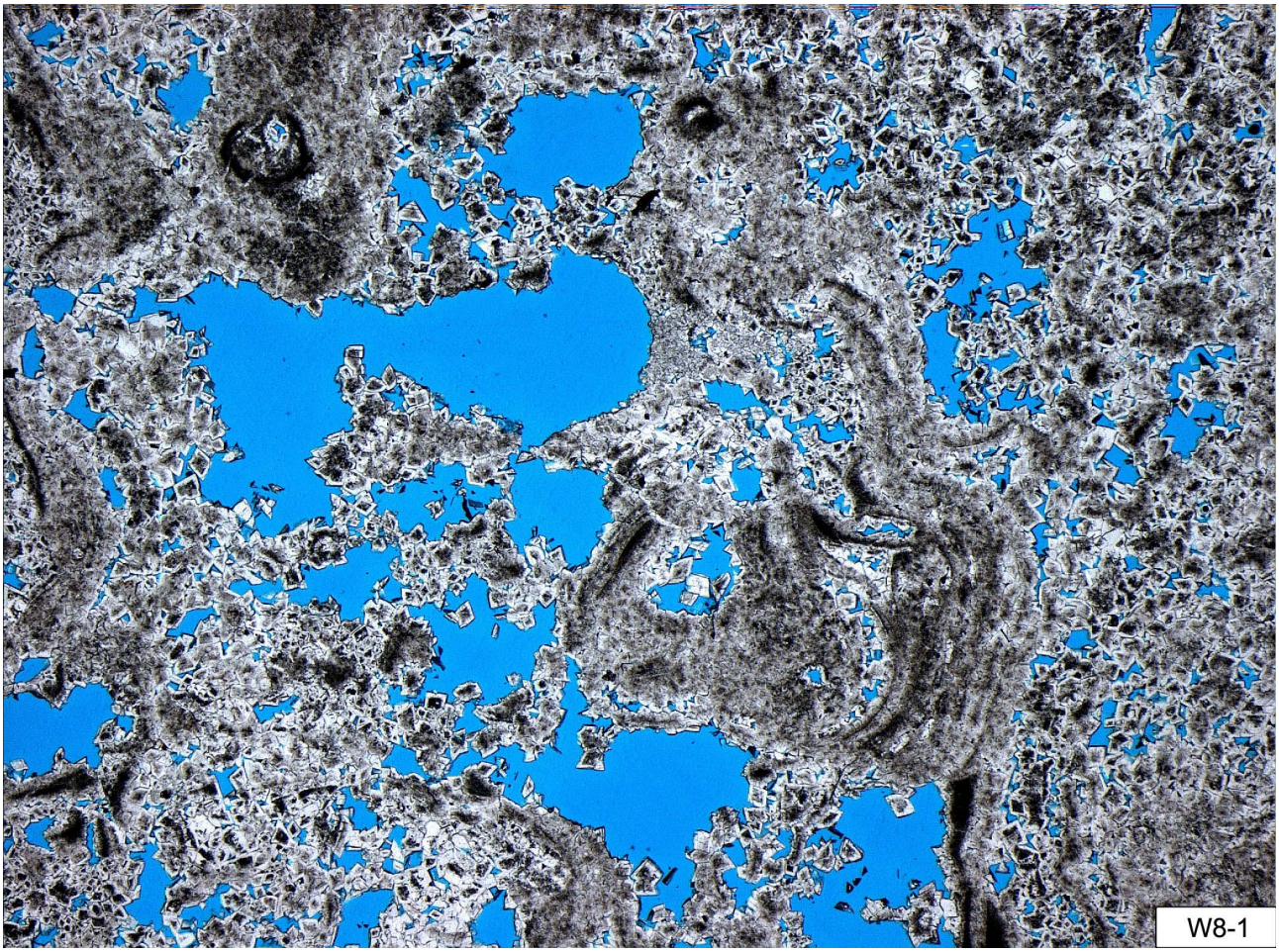

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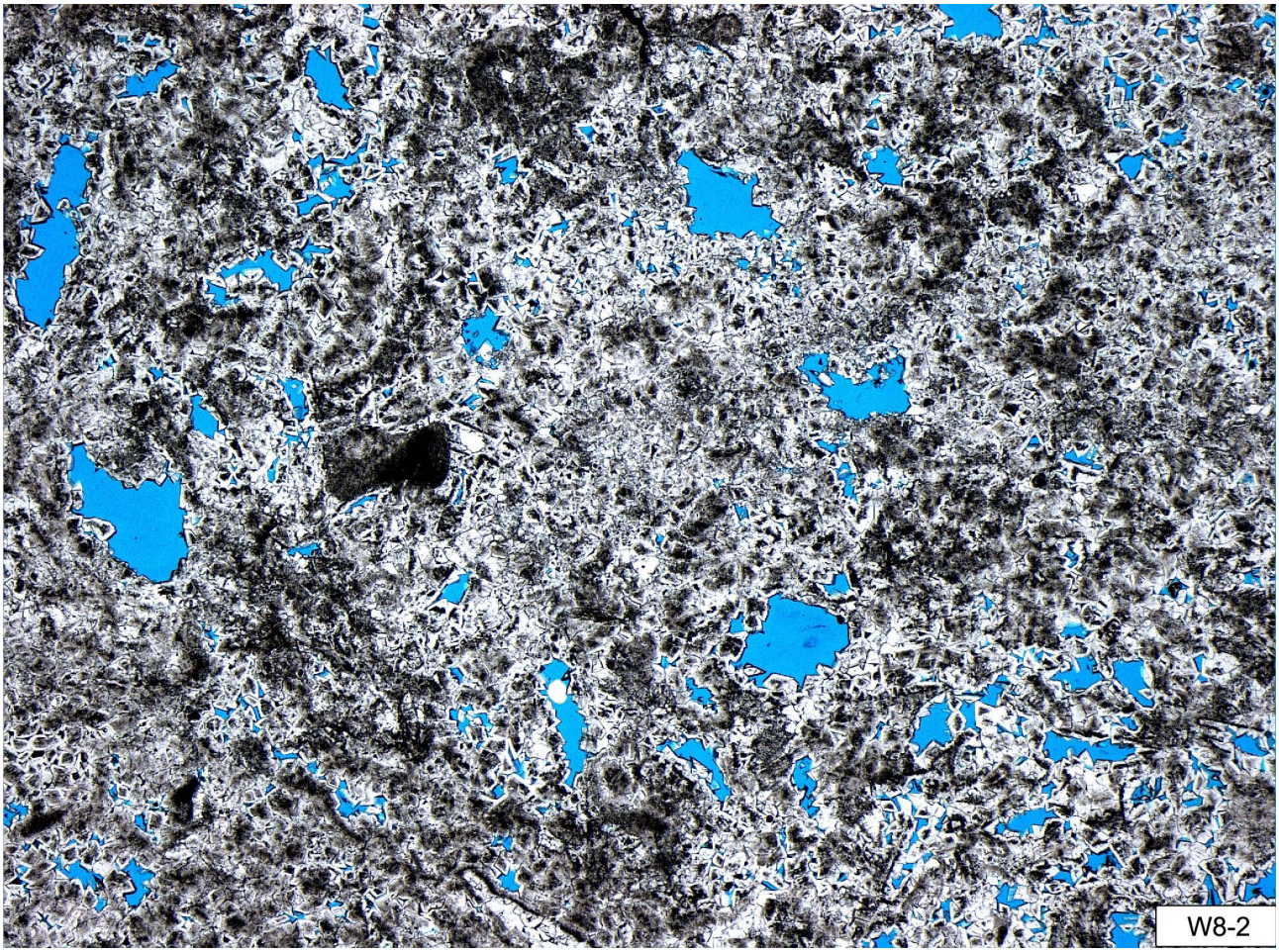

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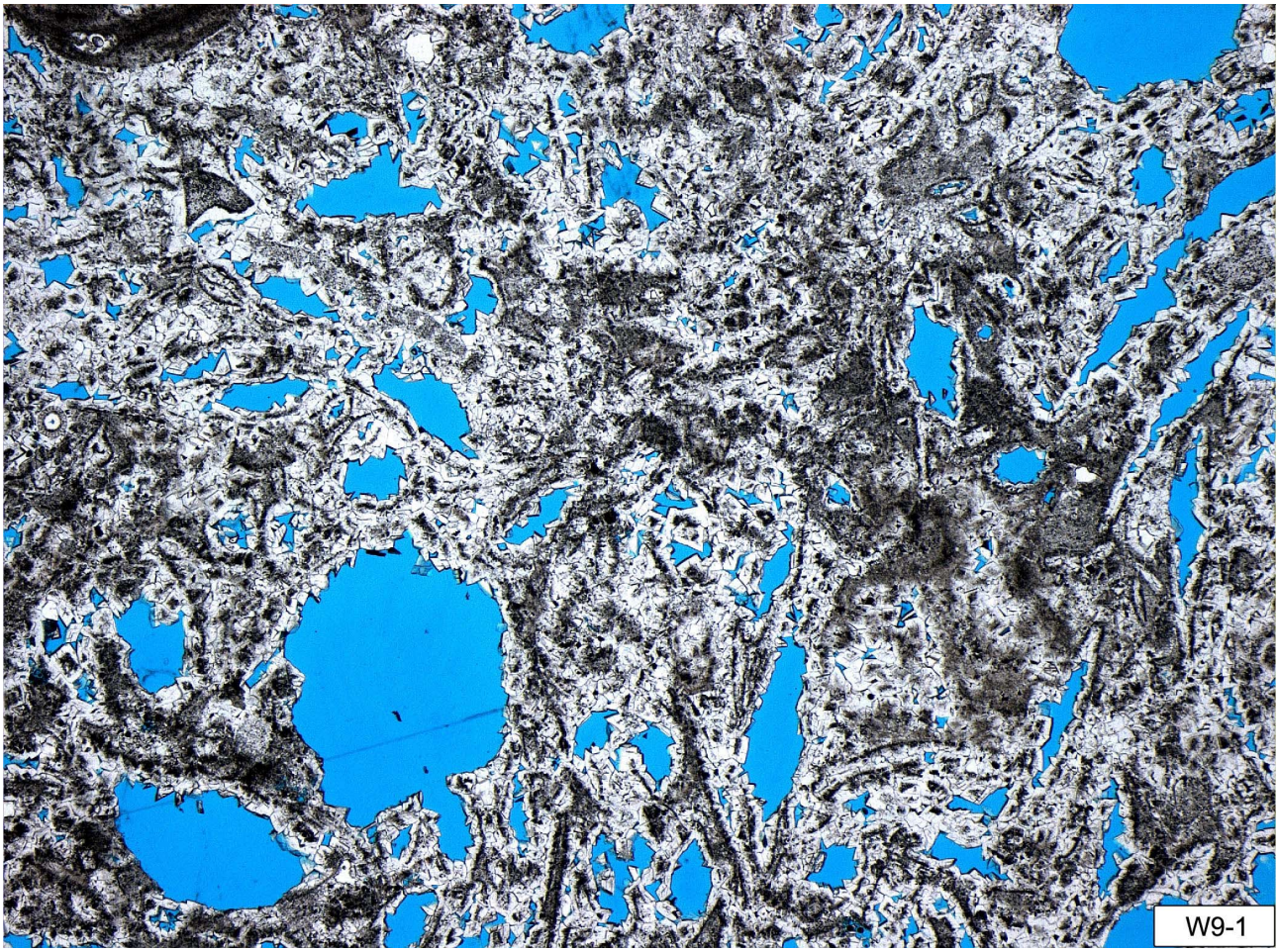

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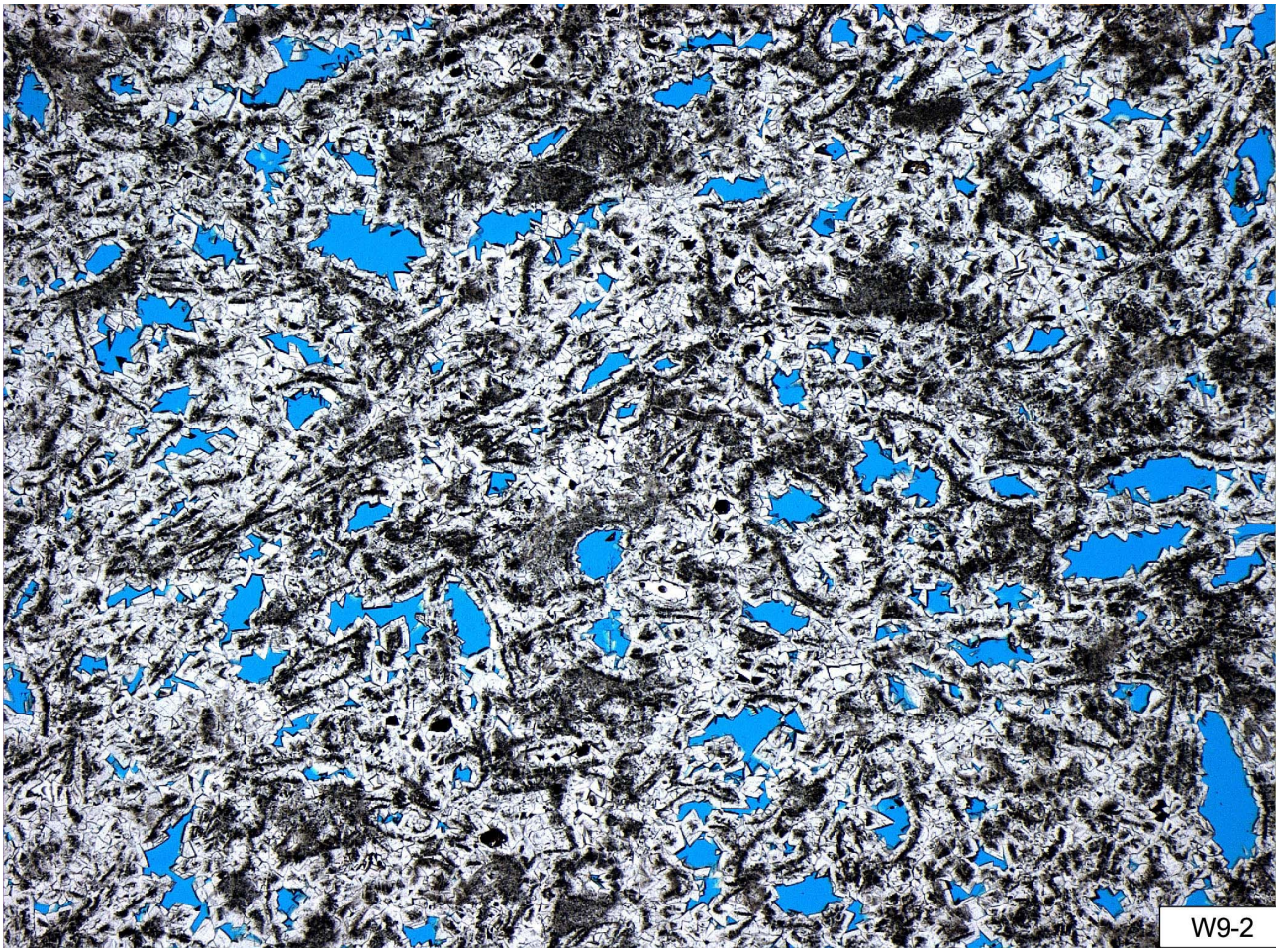

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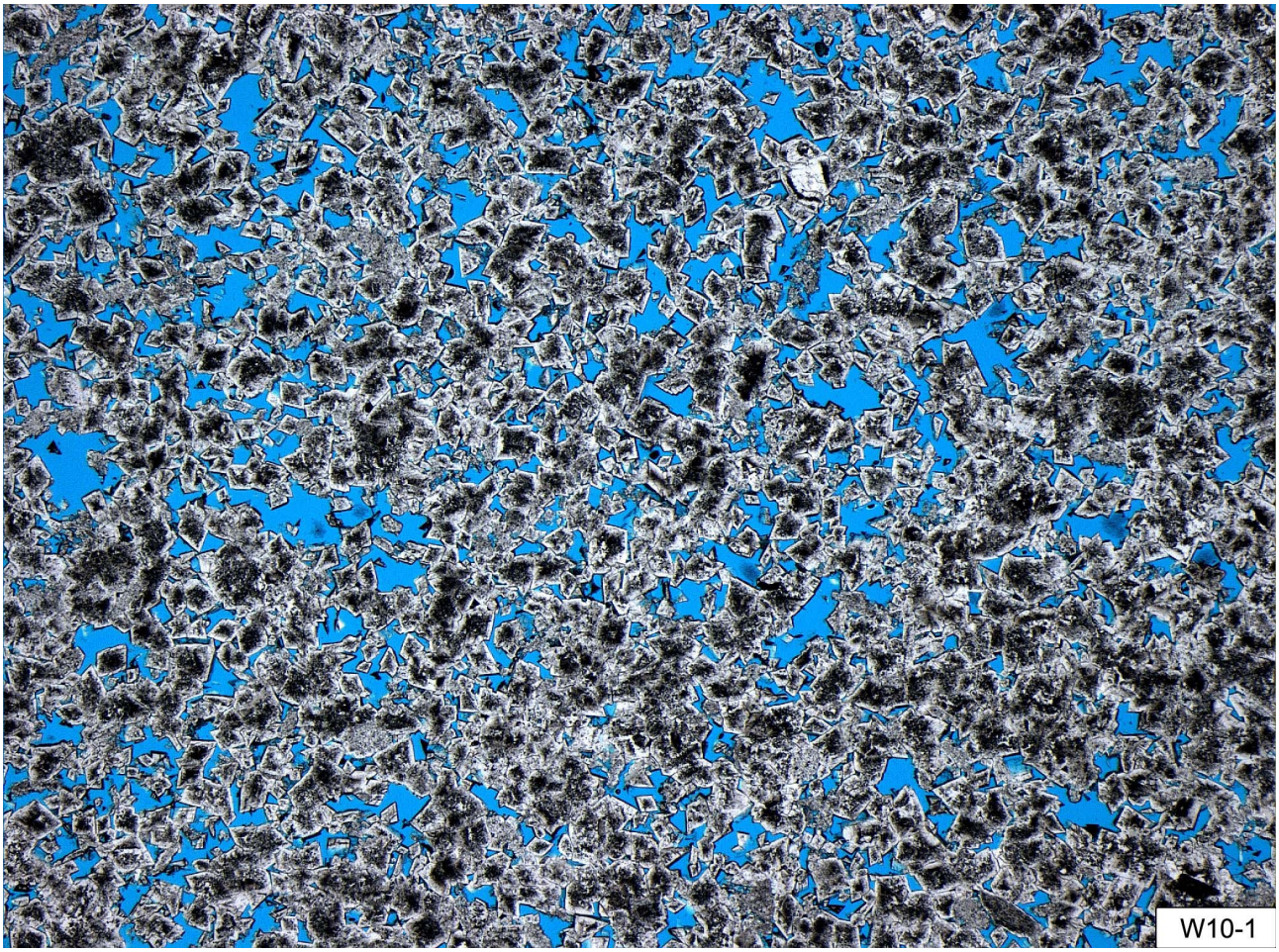

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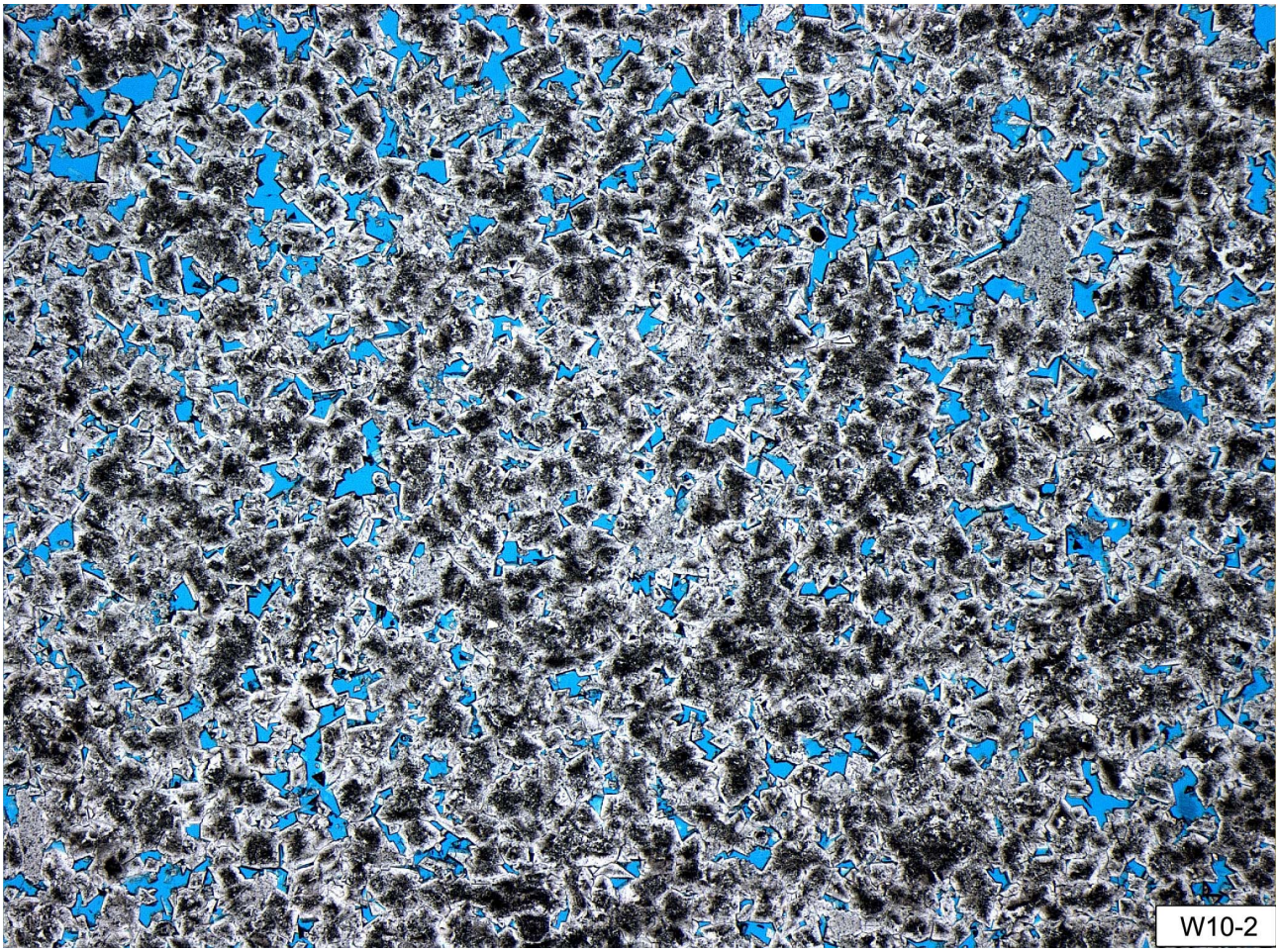
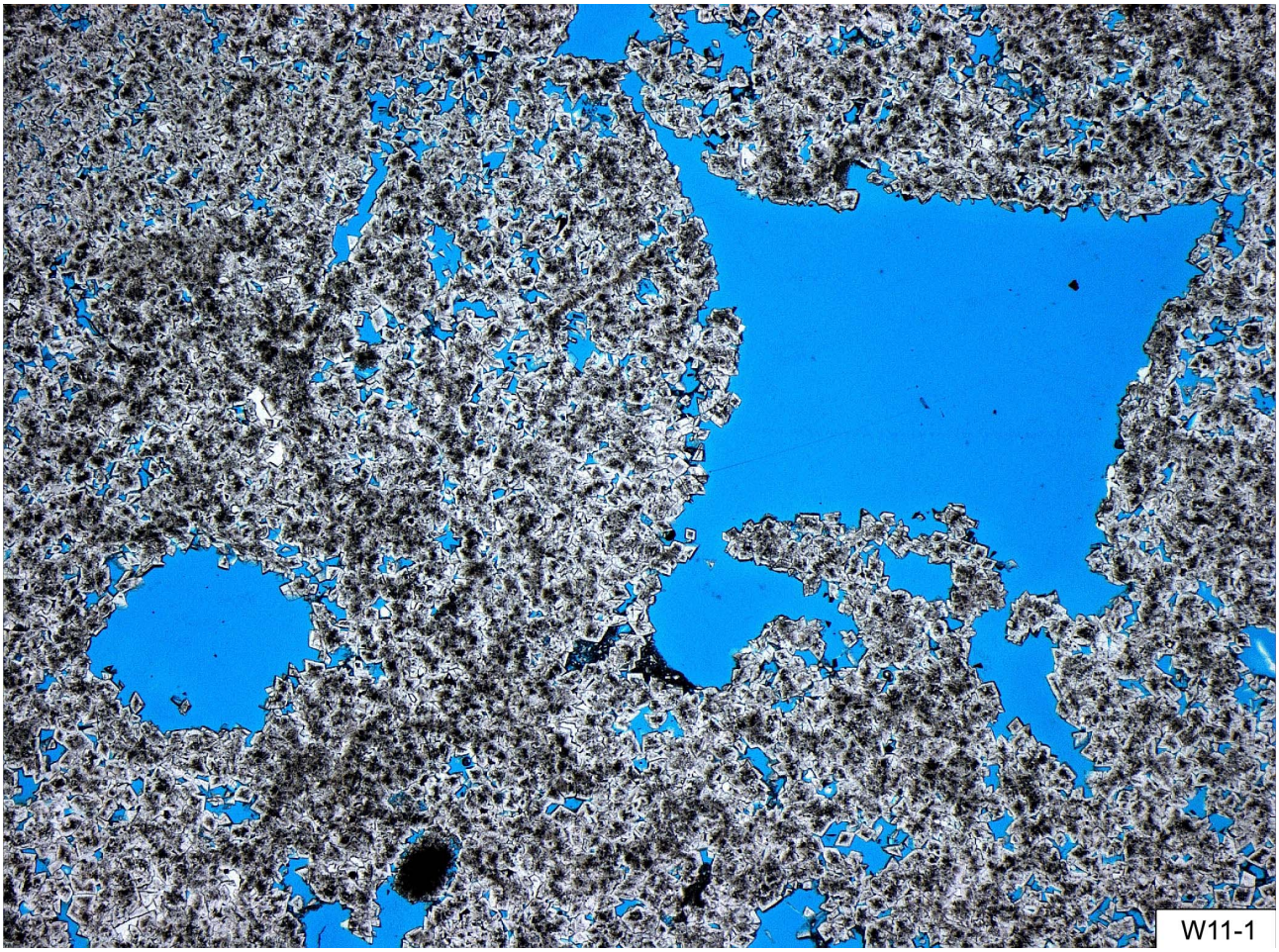


Plate AP2 (continued).



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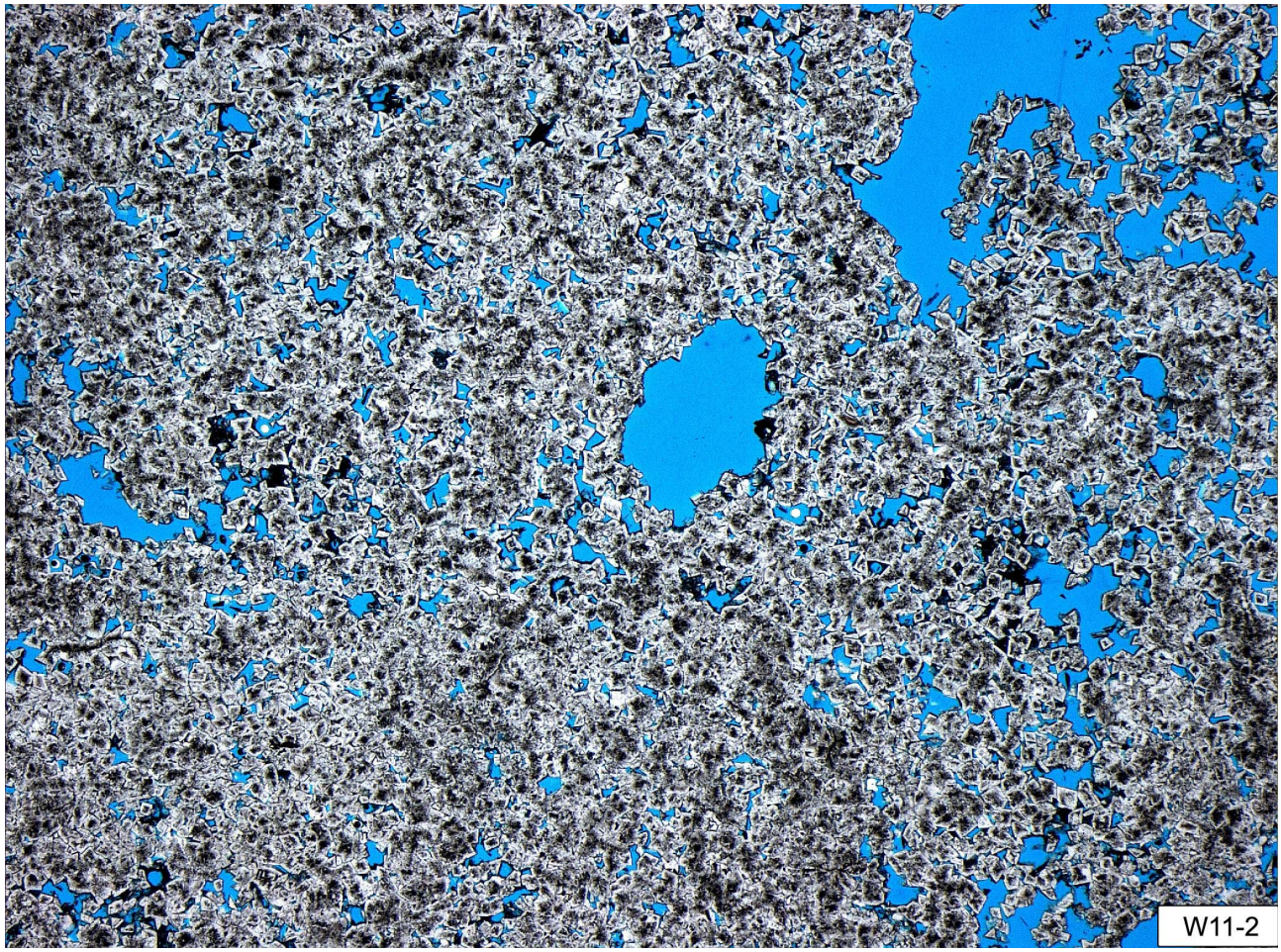

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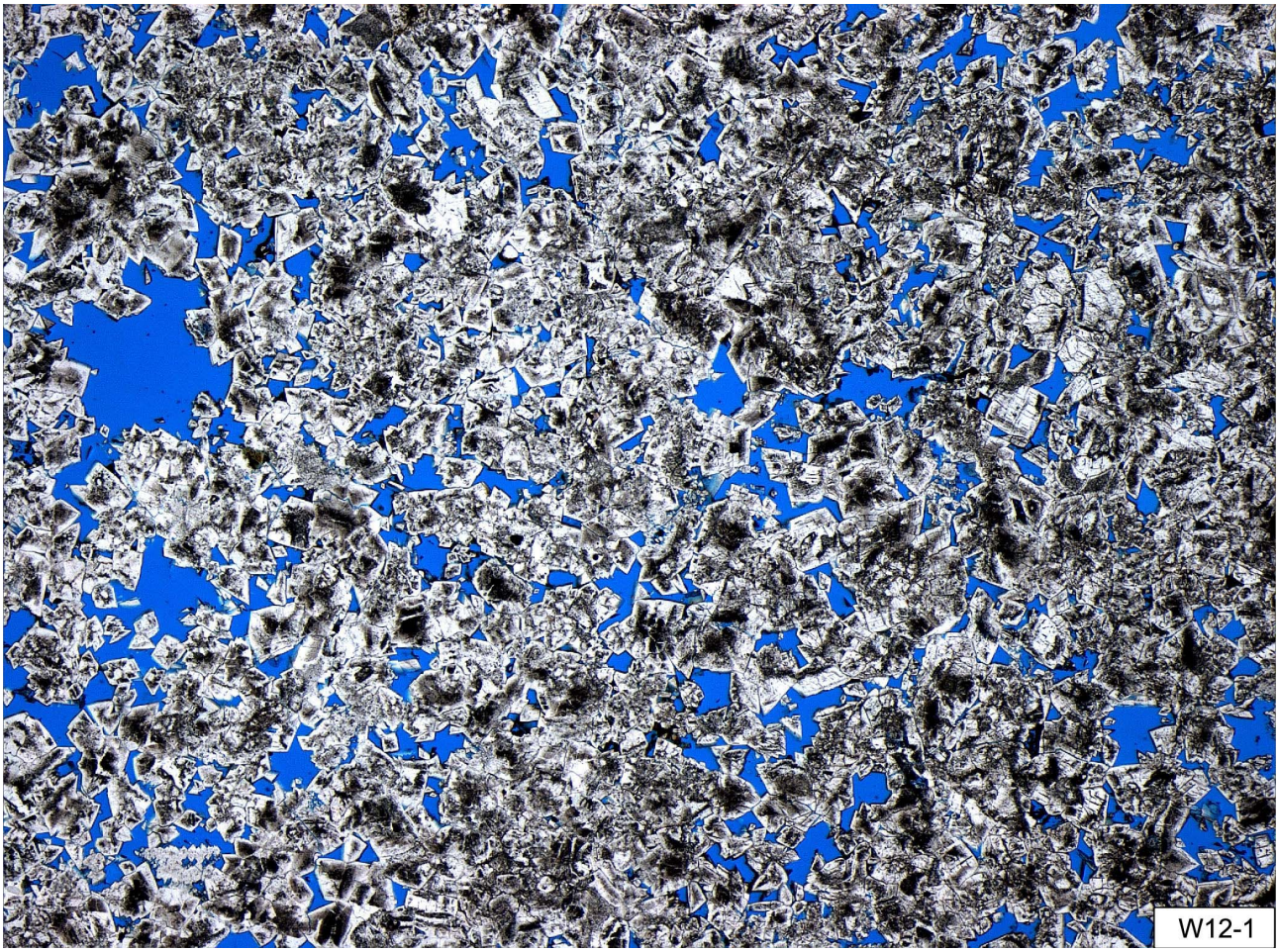

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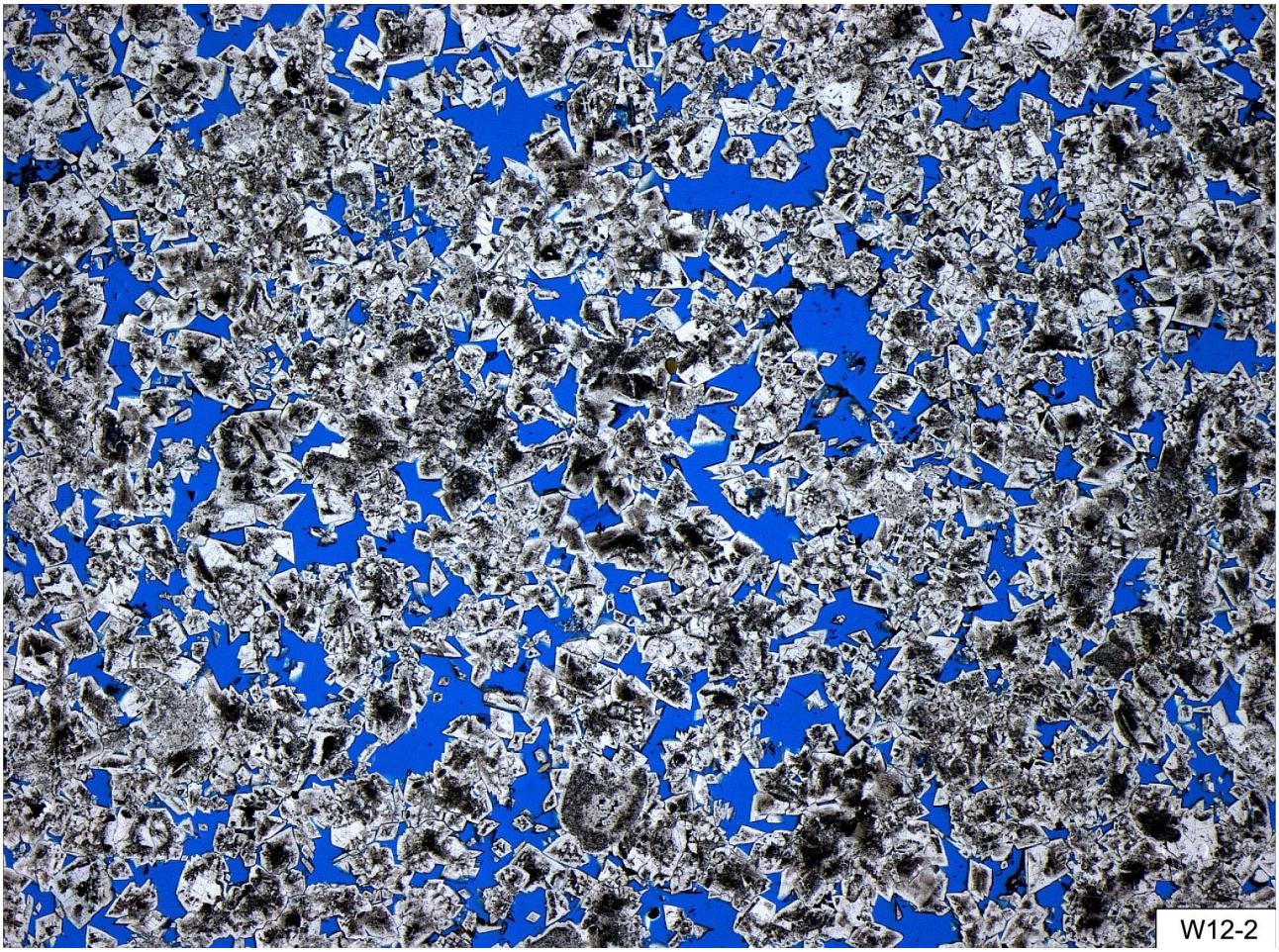

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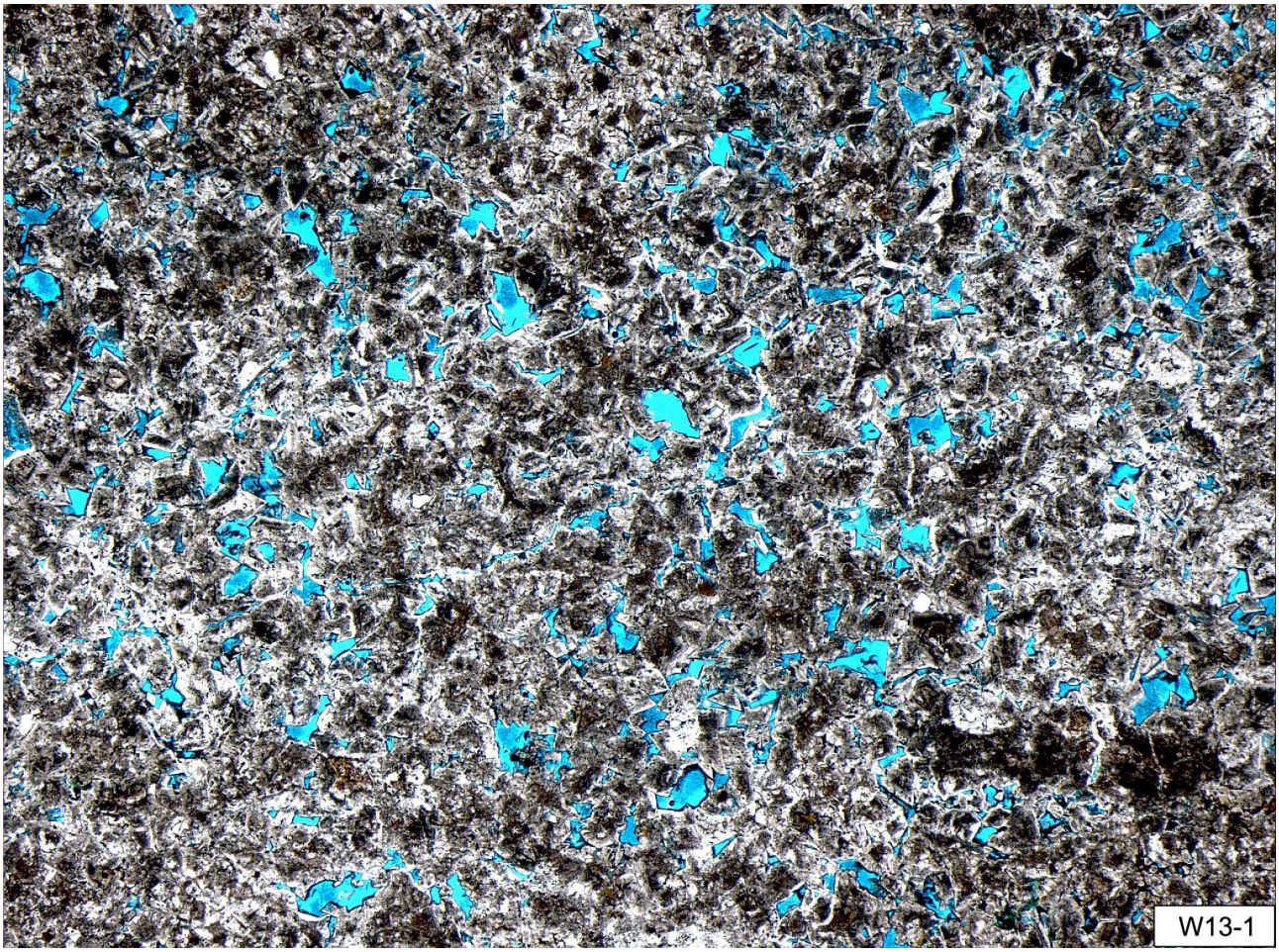

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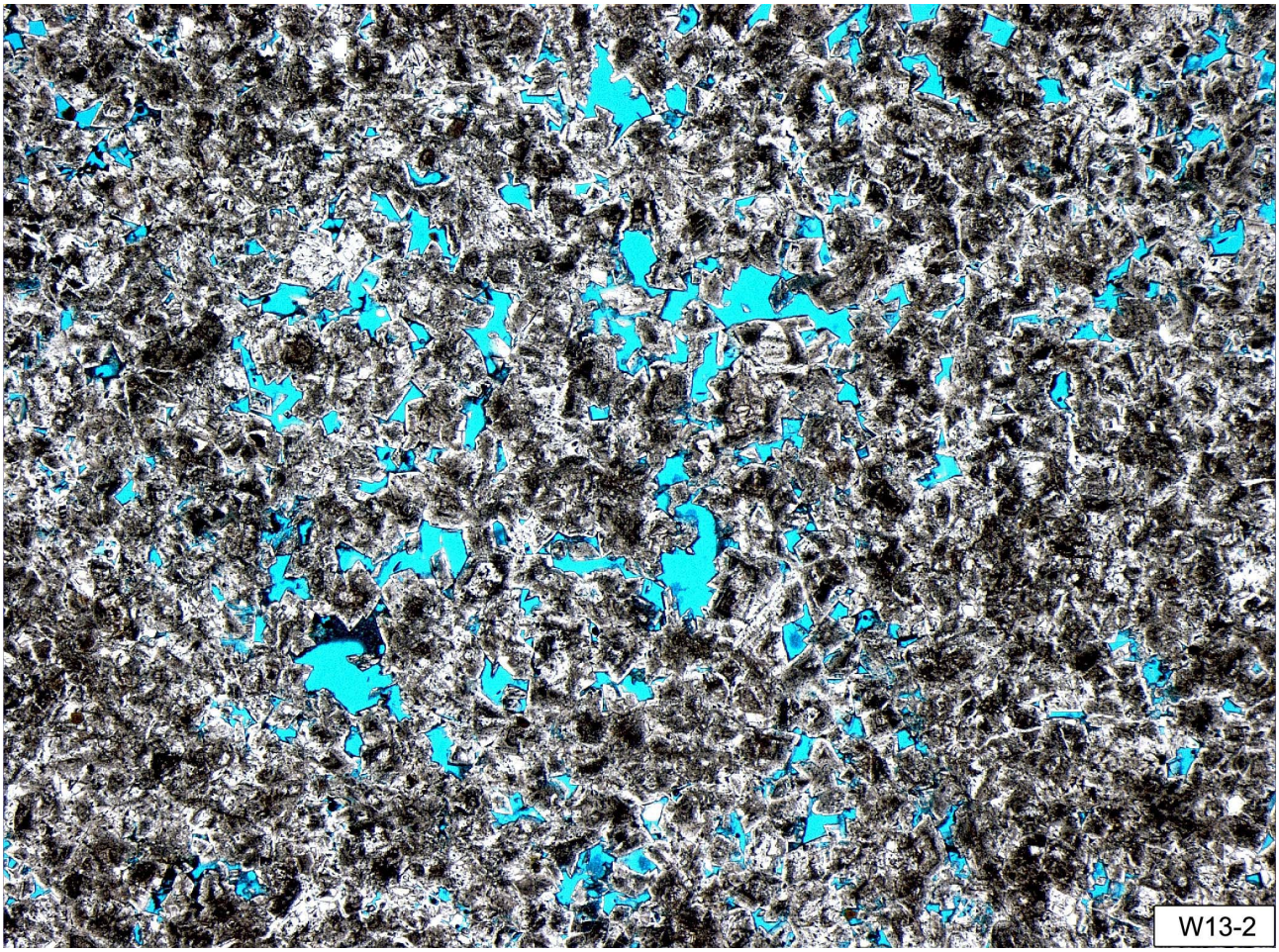

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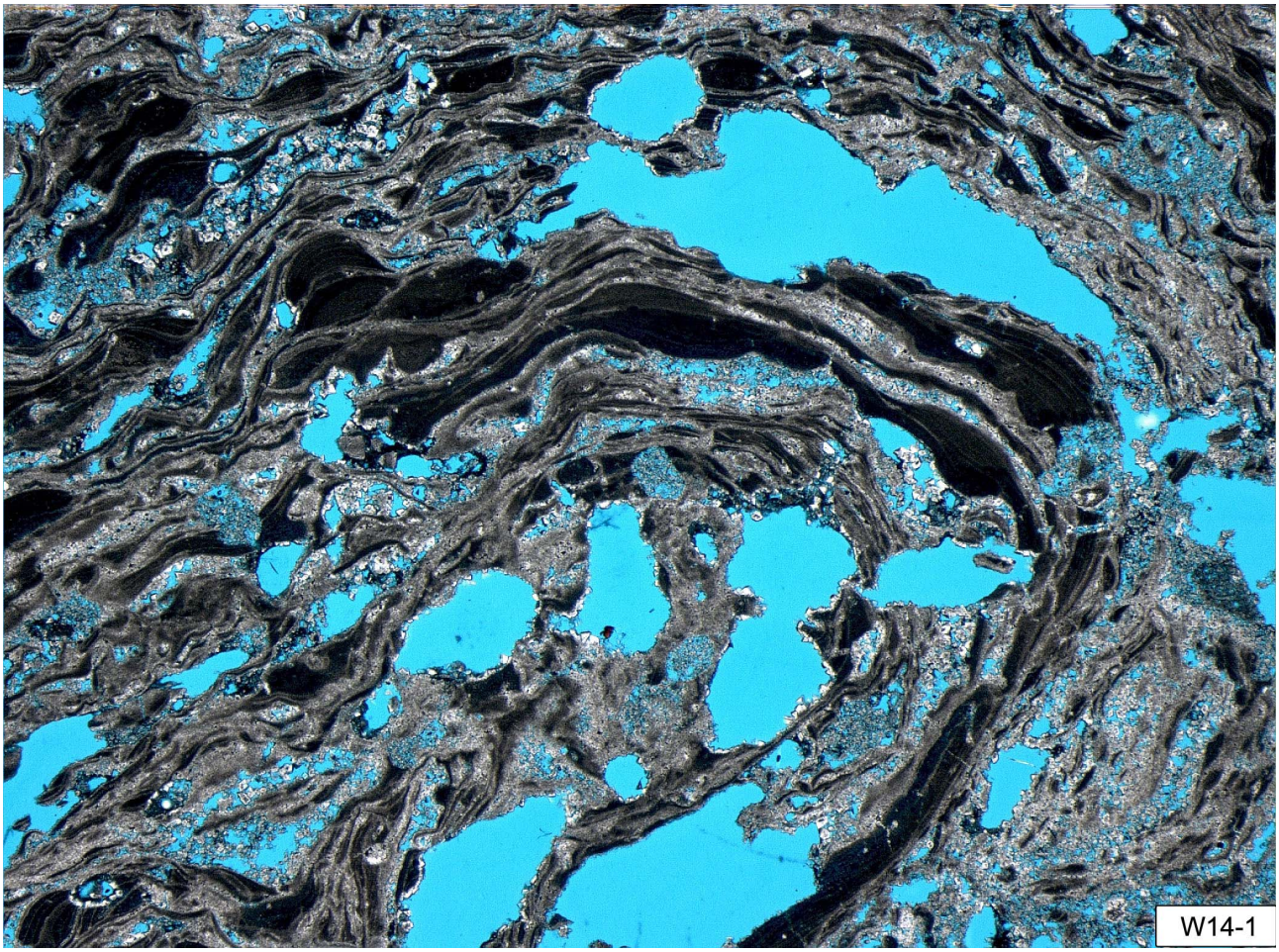

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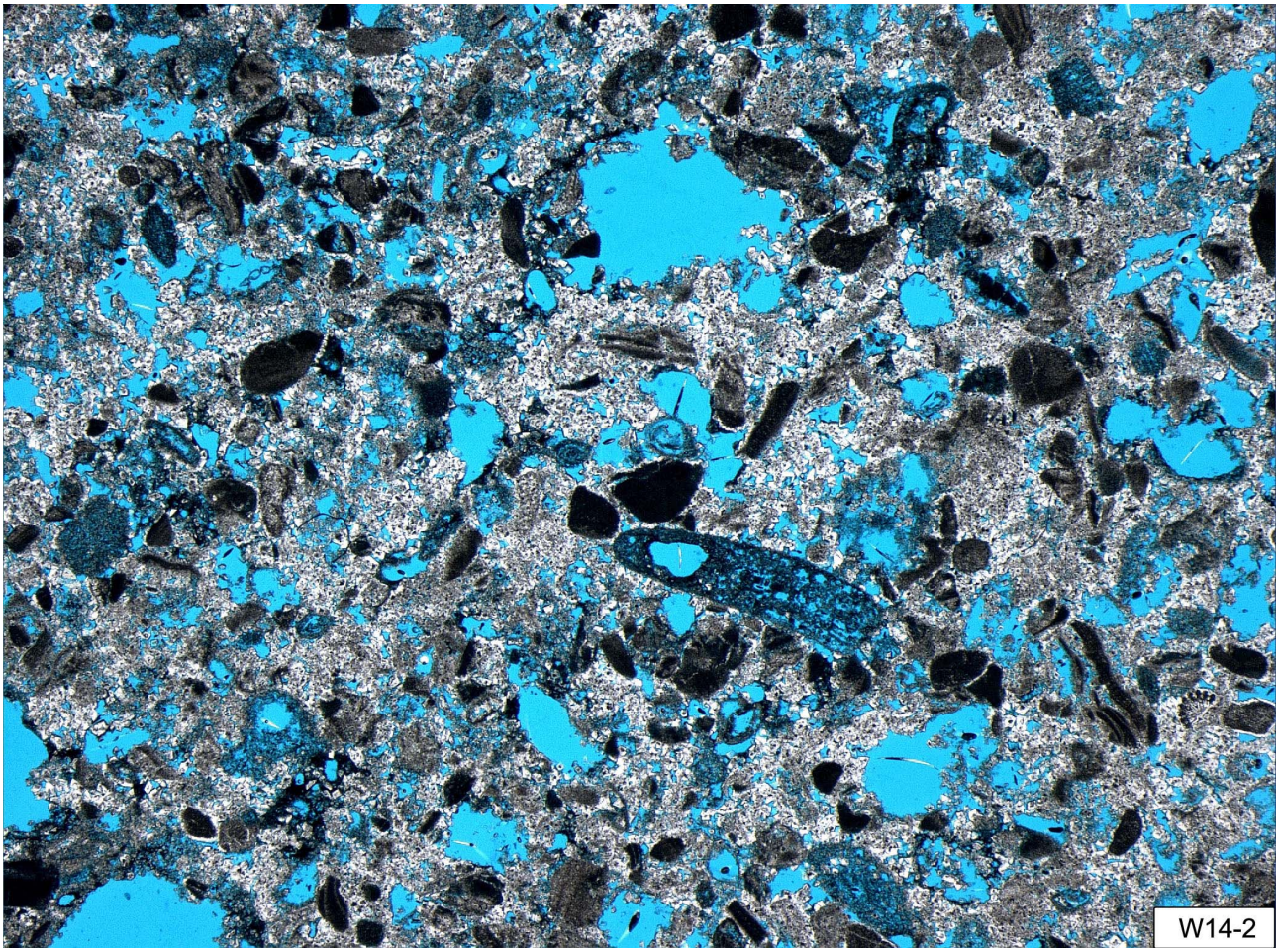

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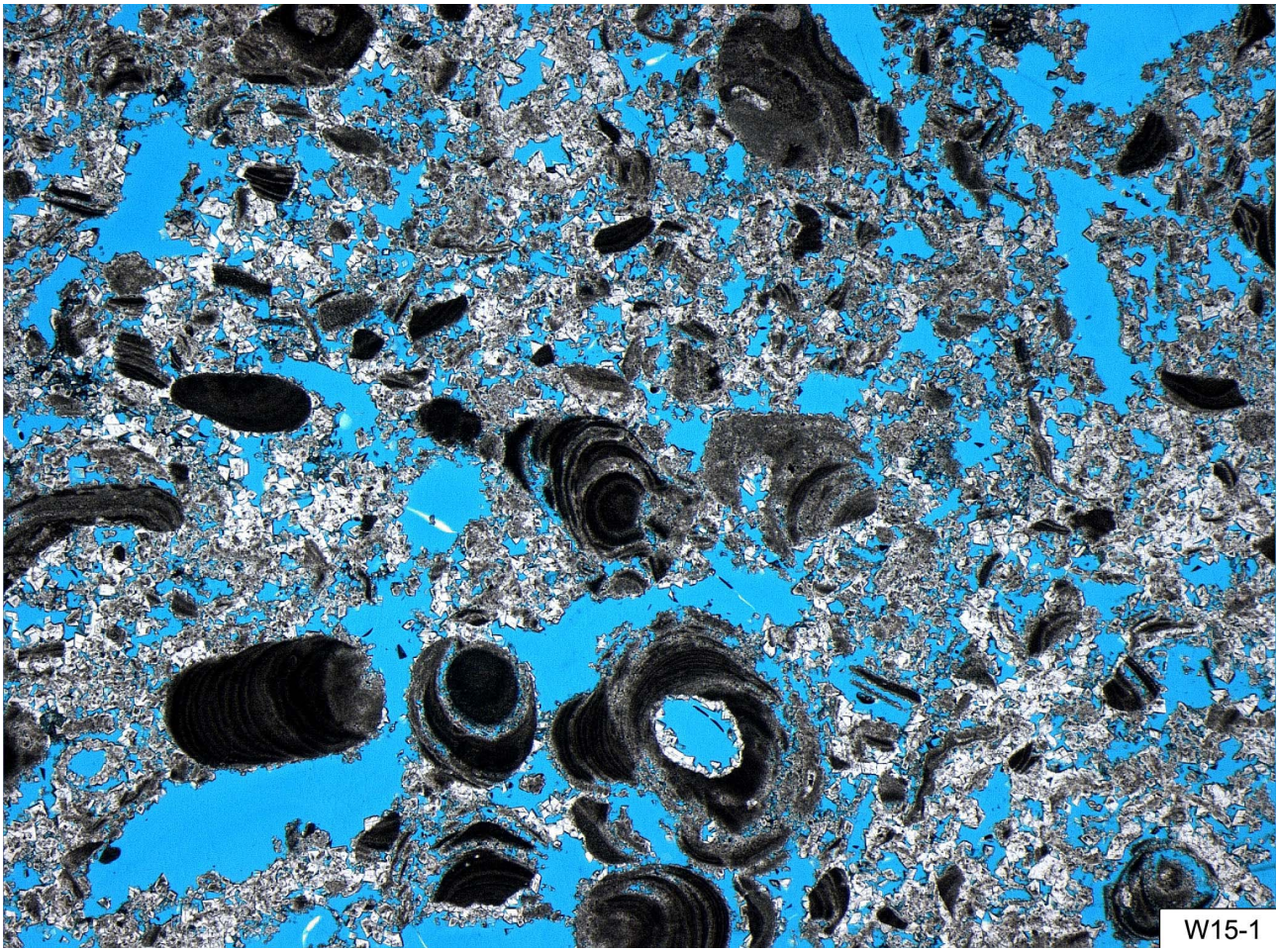

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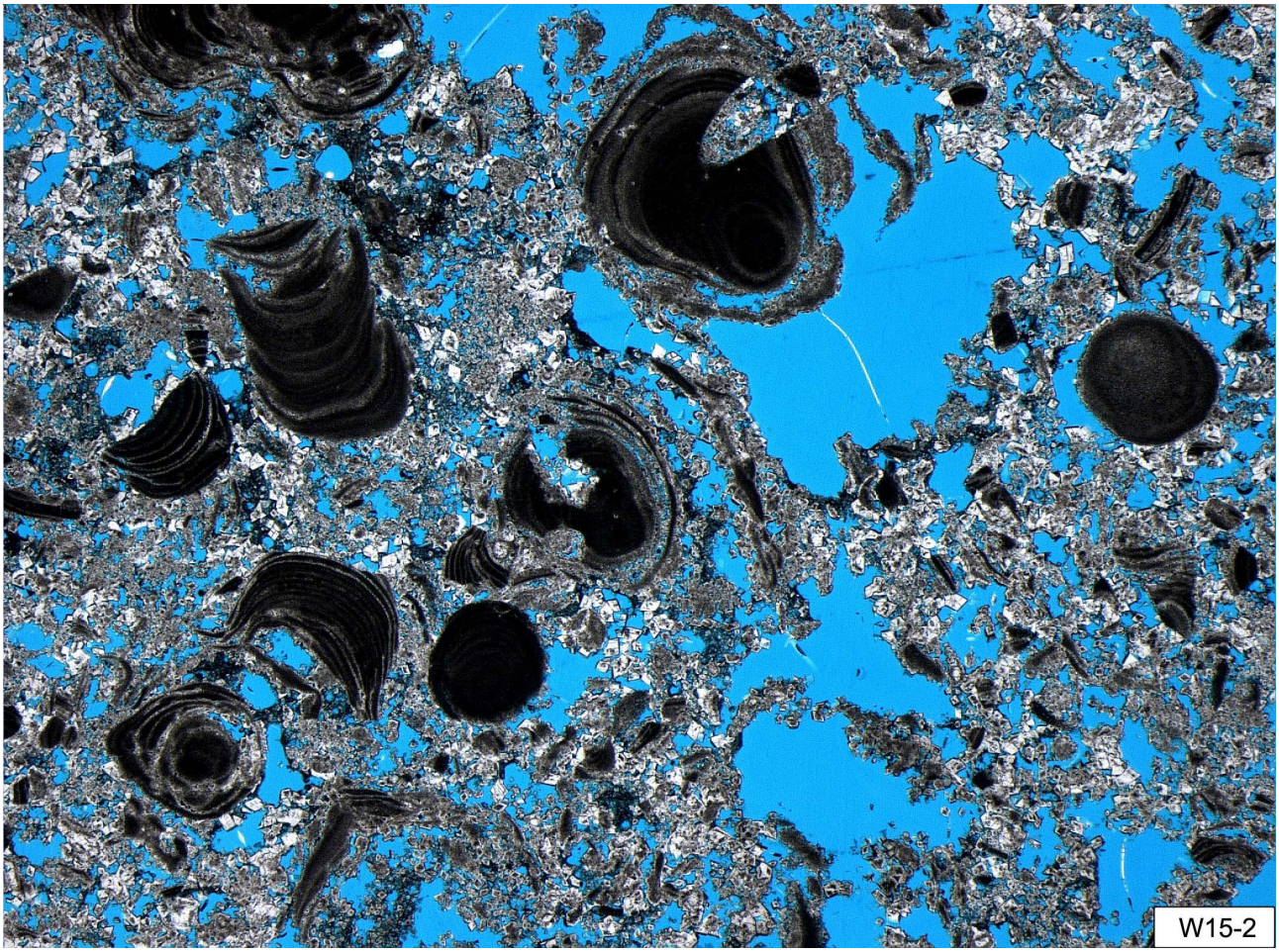

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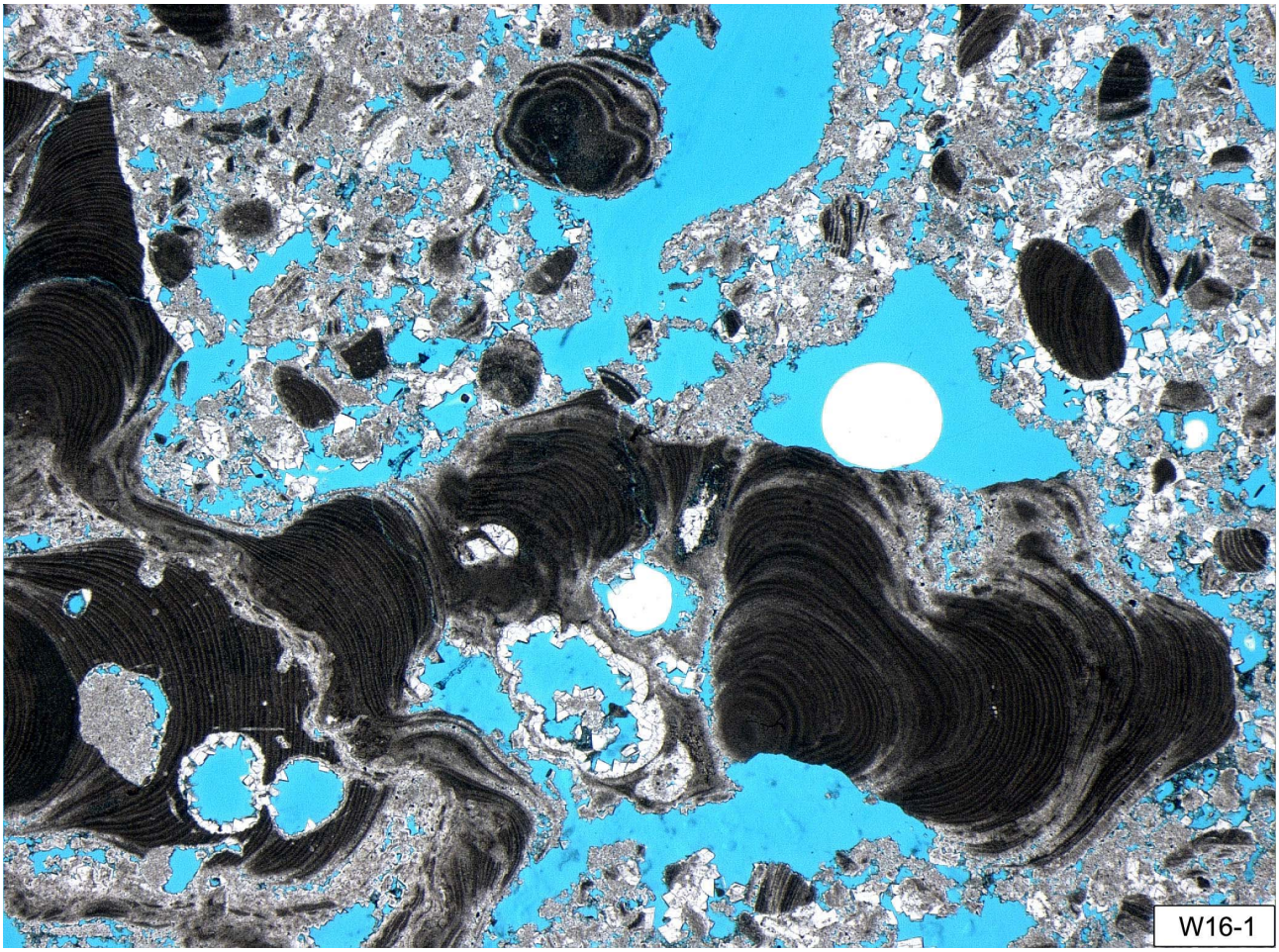

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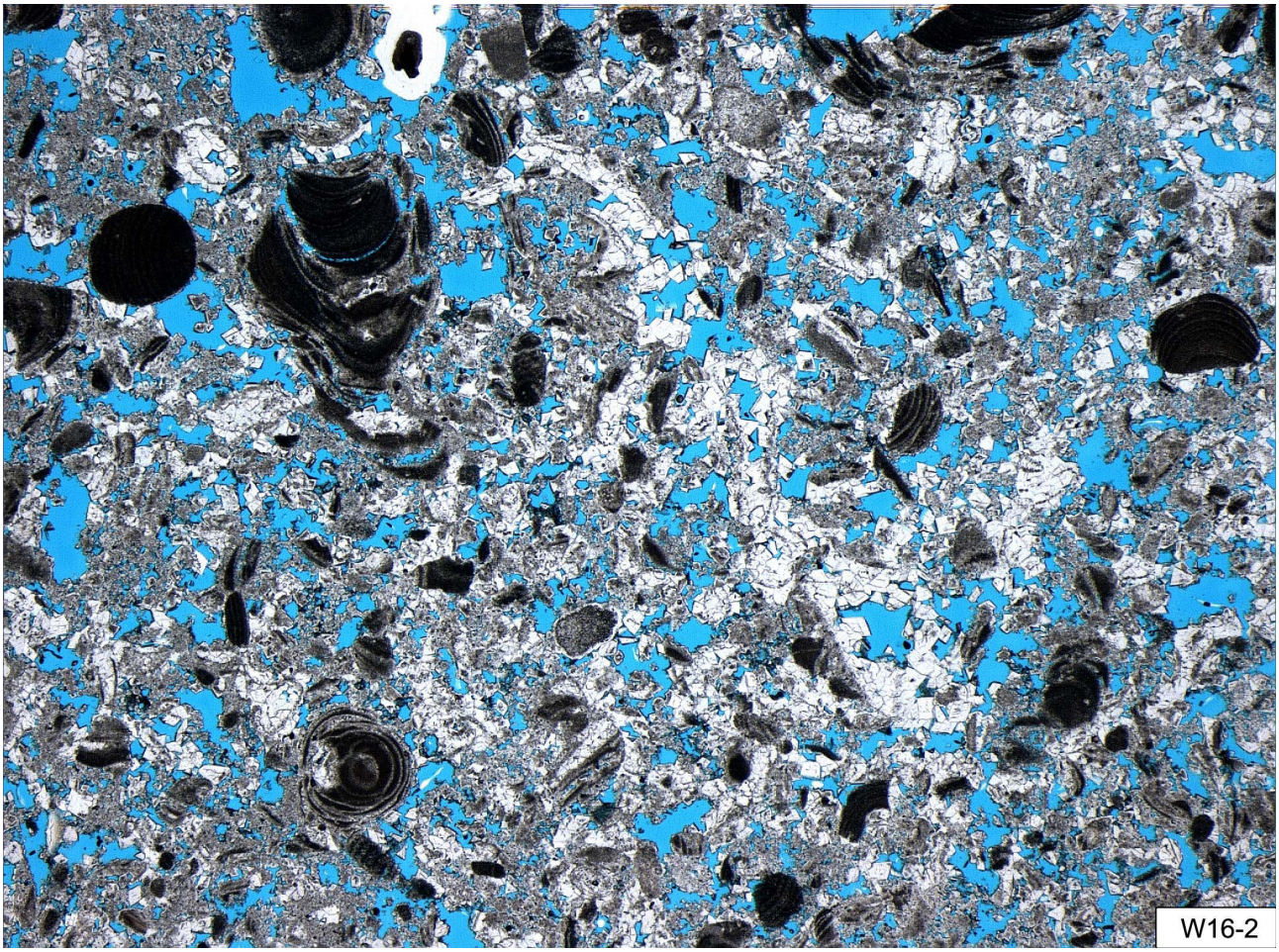

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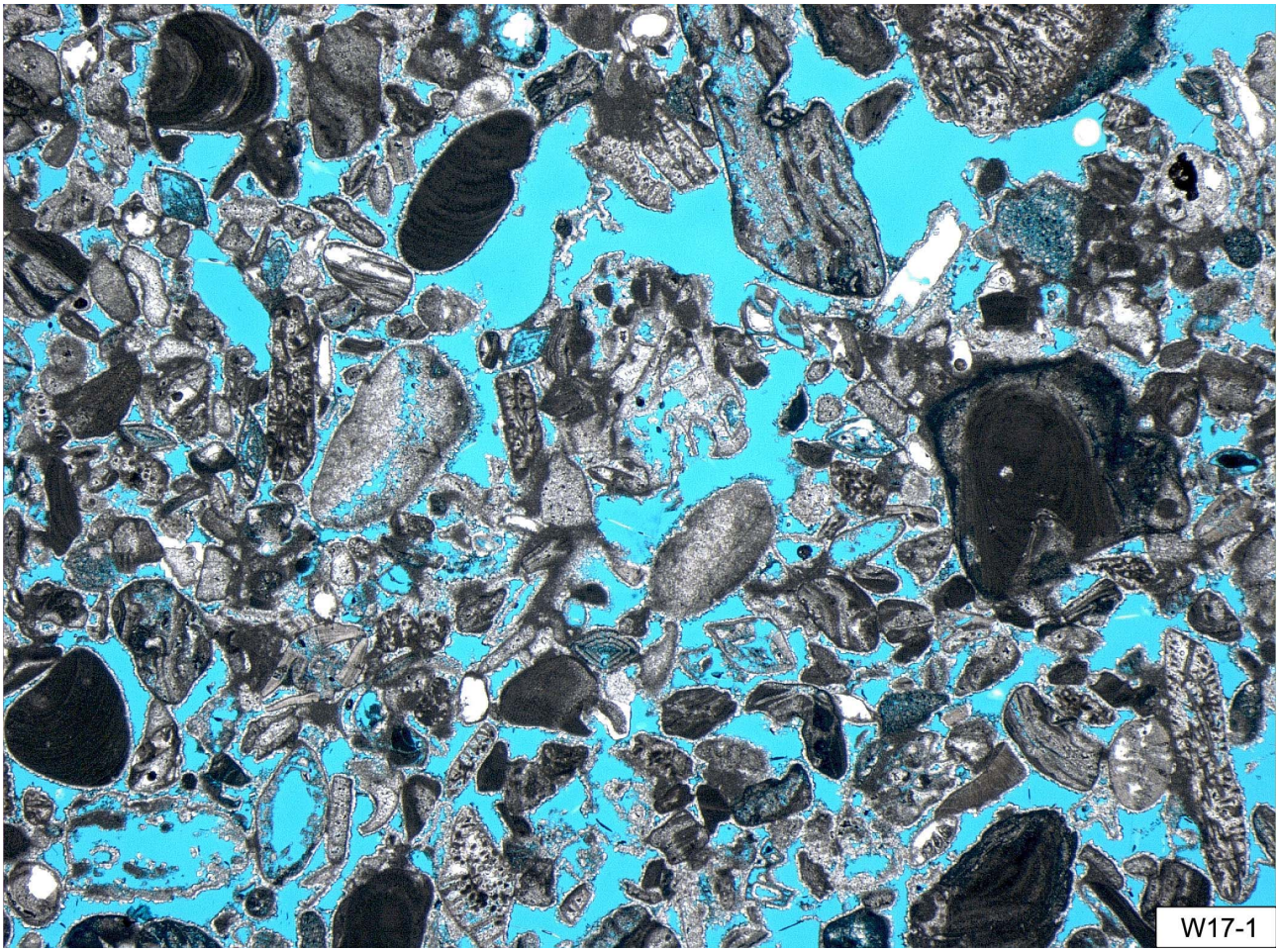

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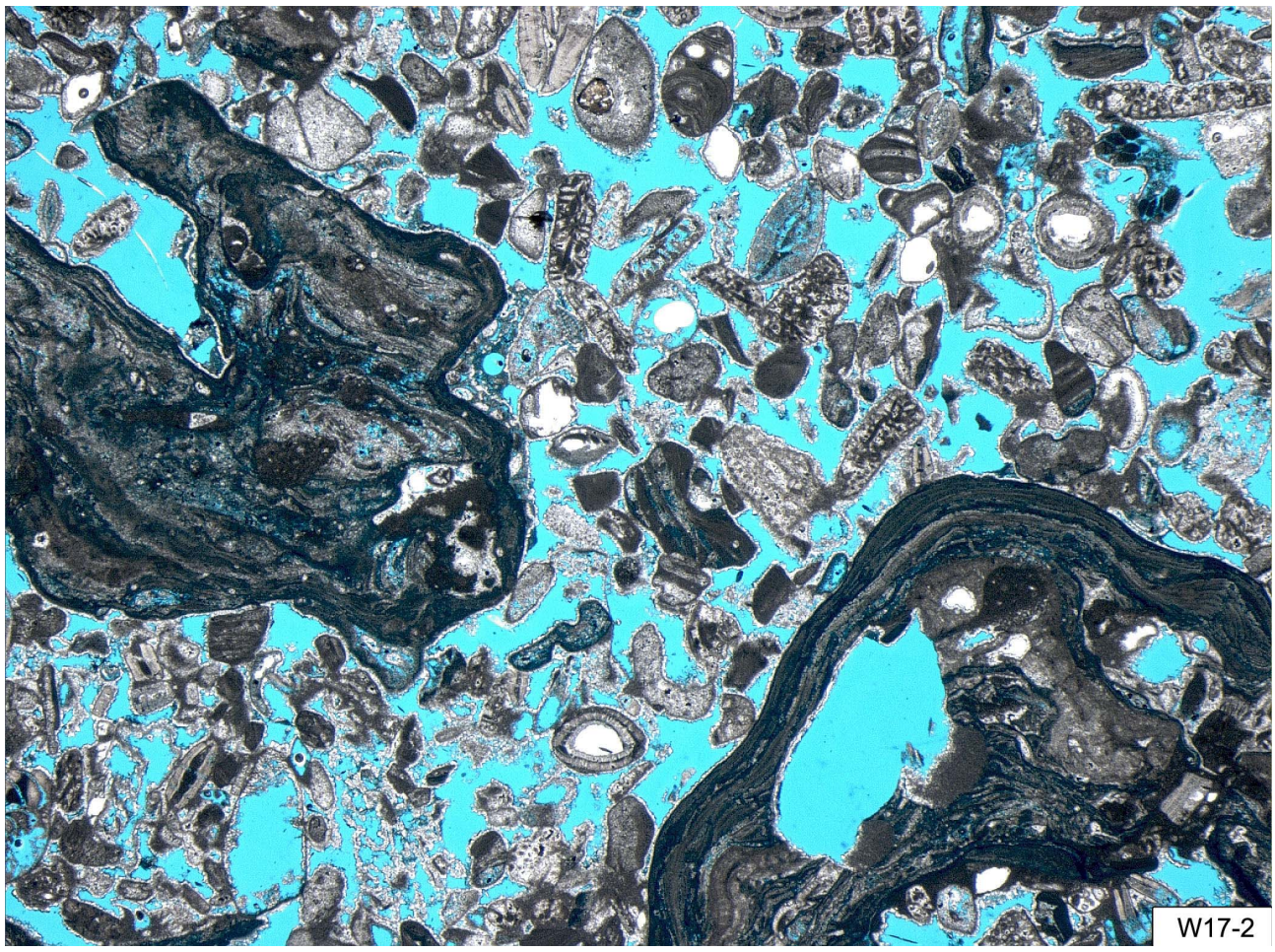

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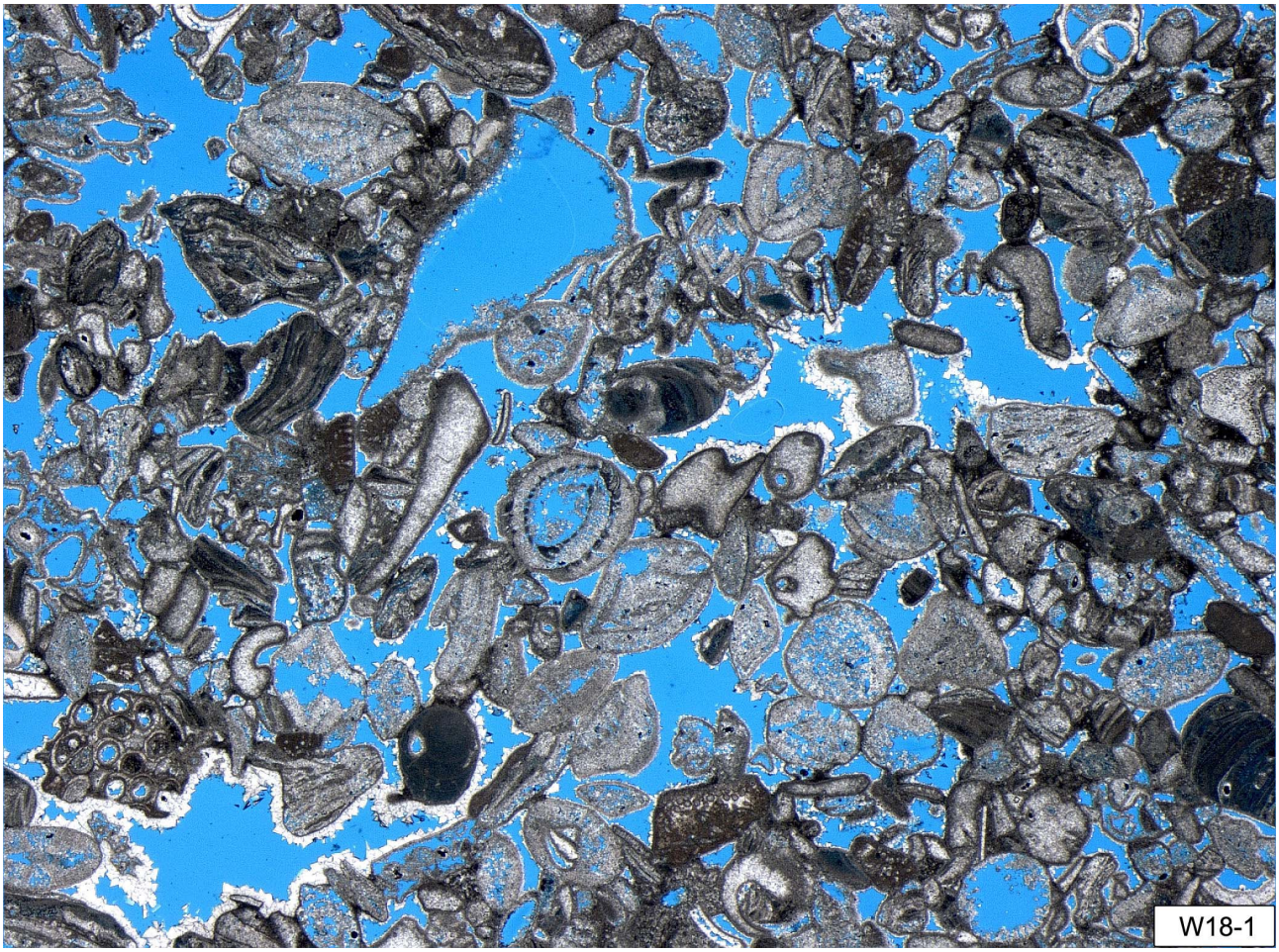

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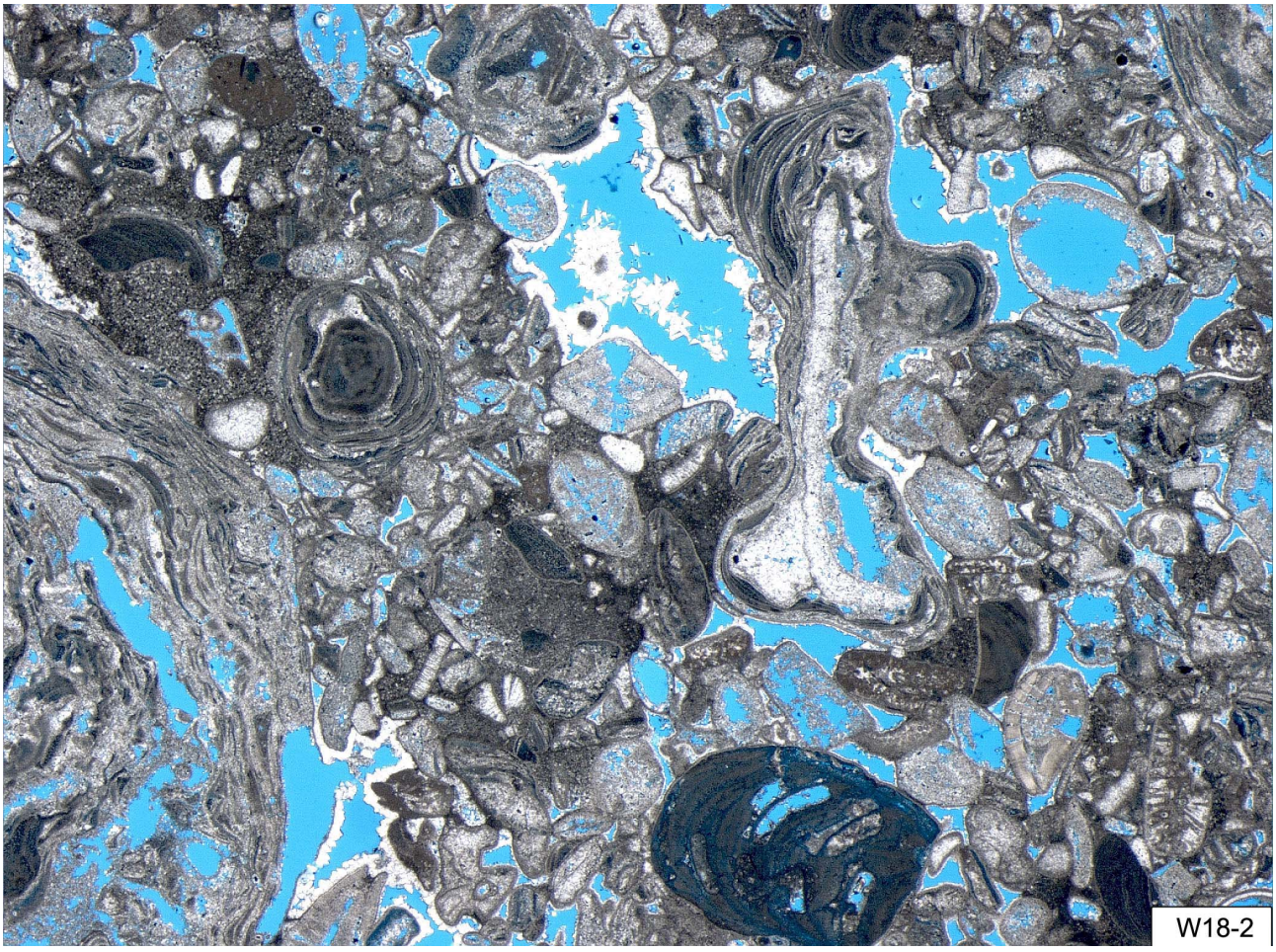

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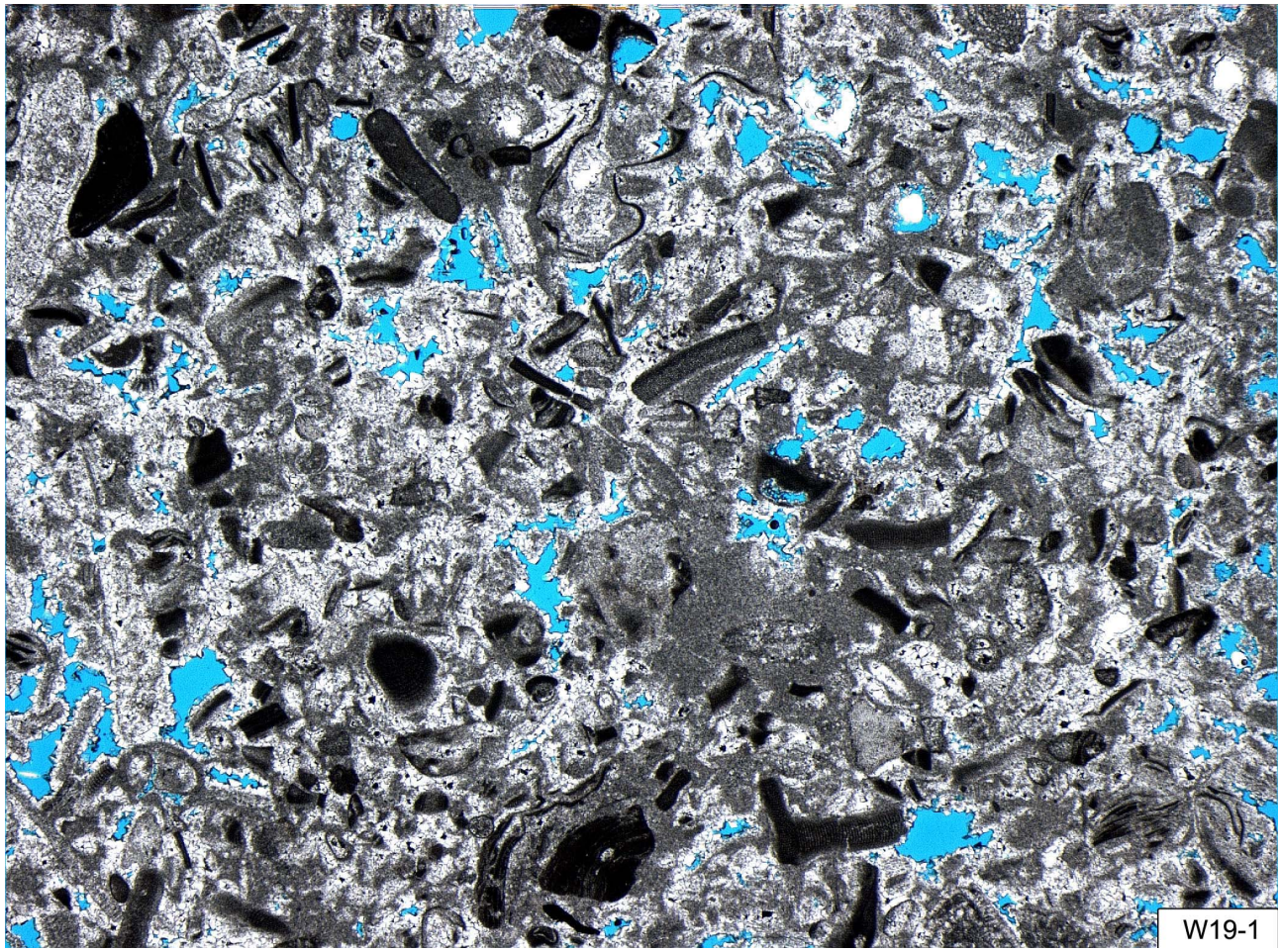

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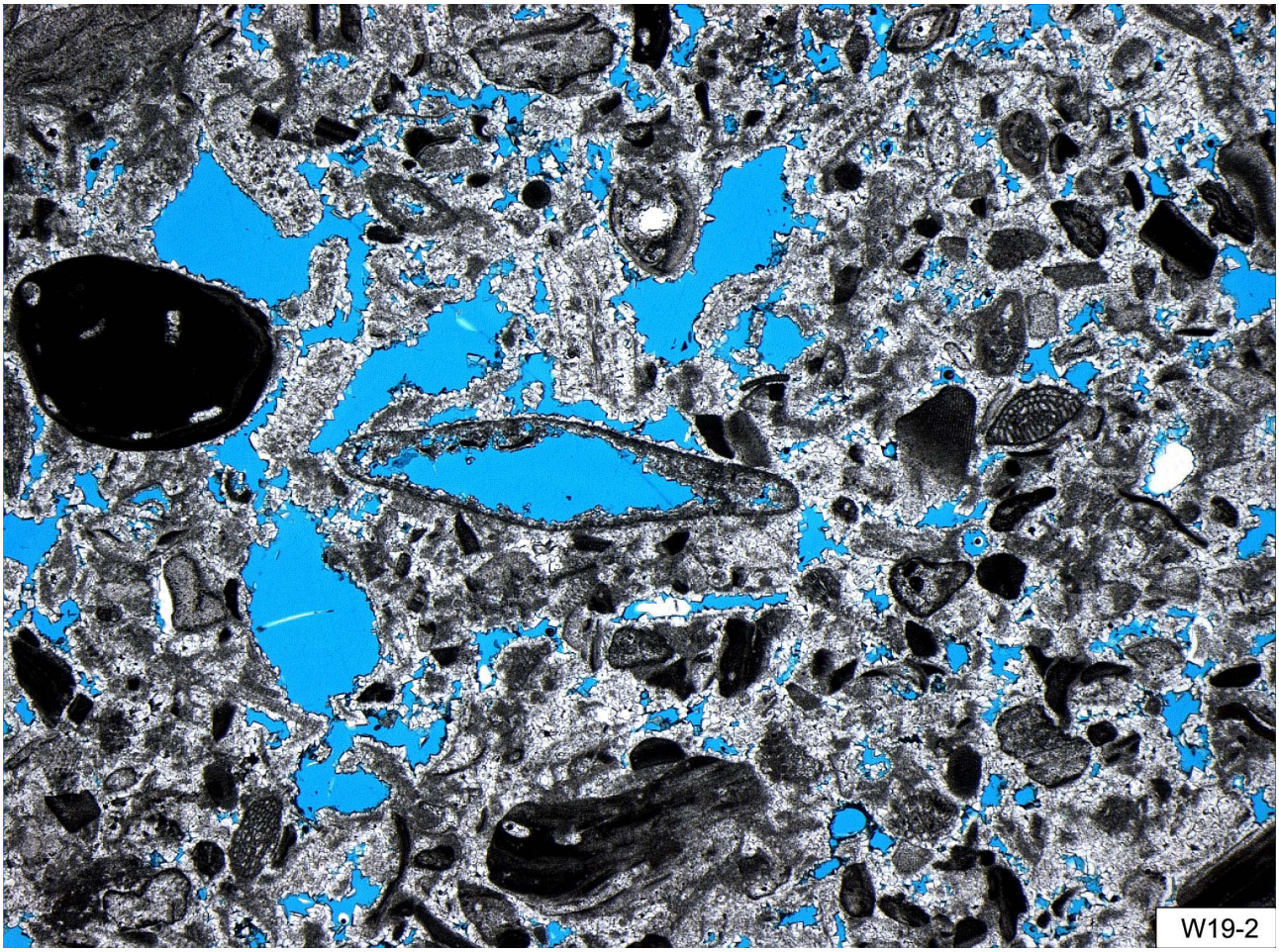

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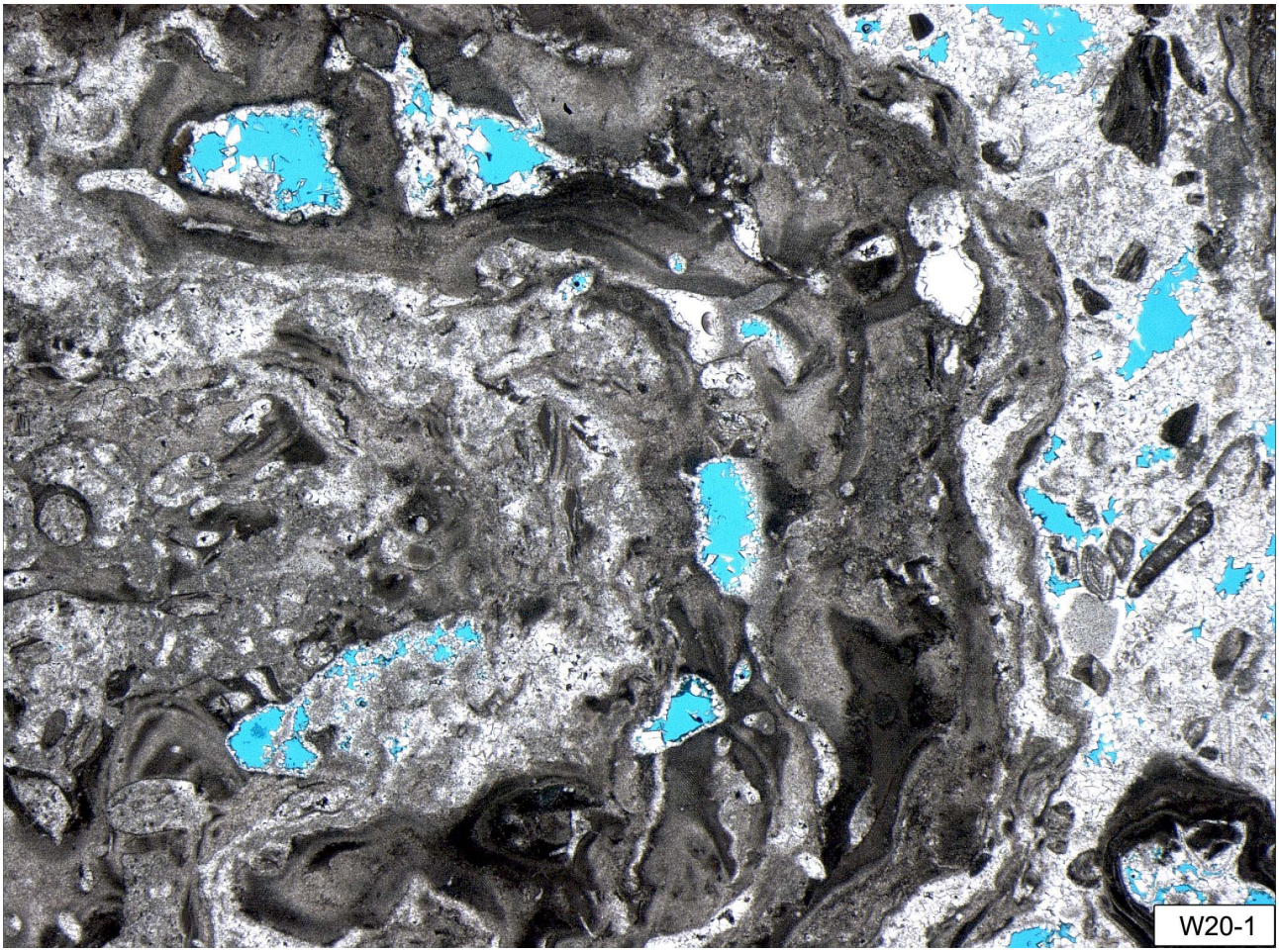

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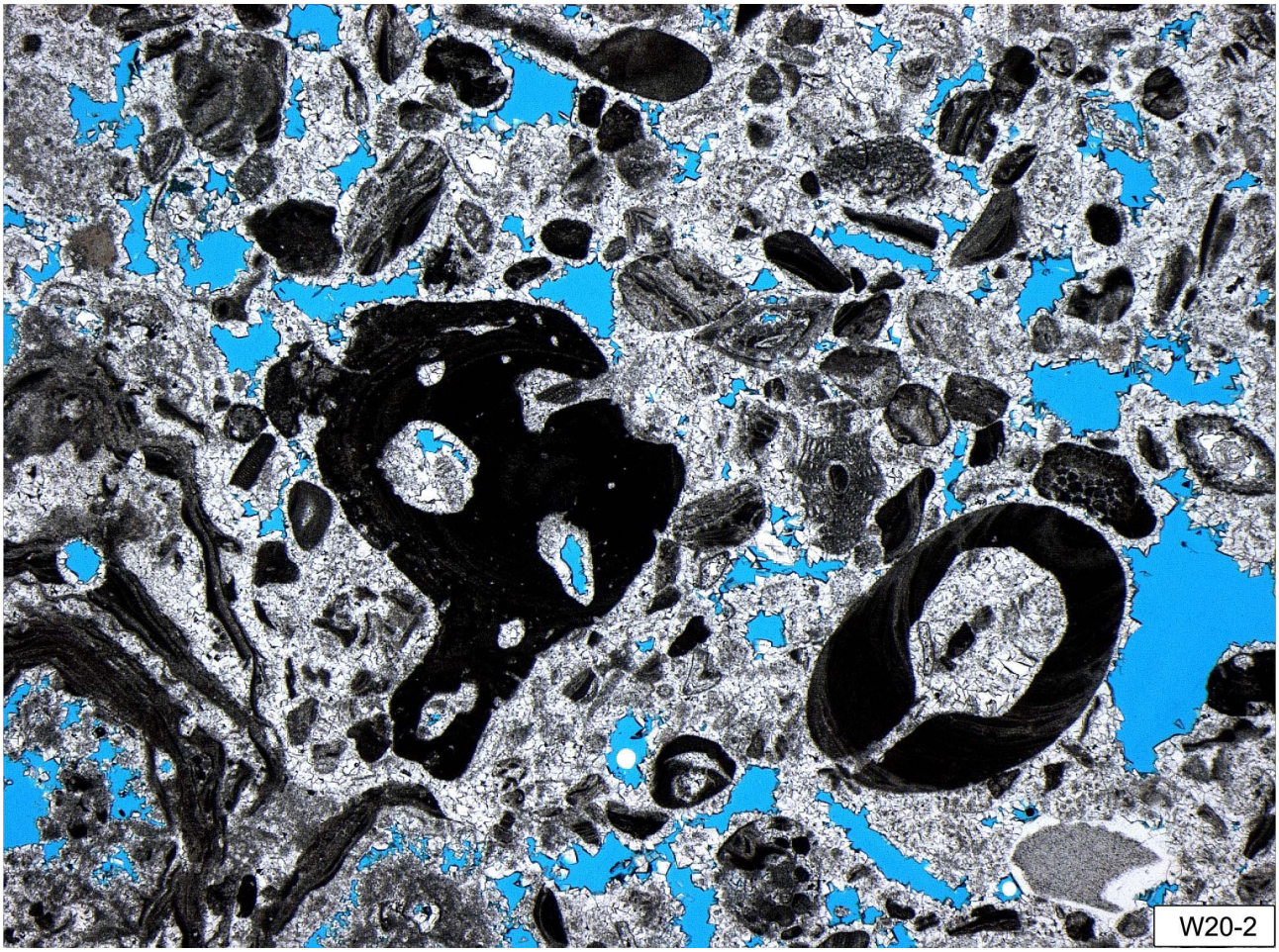

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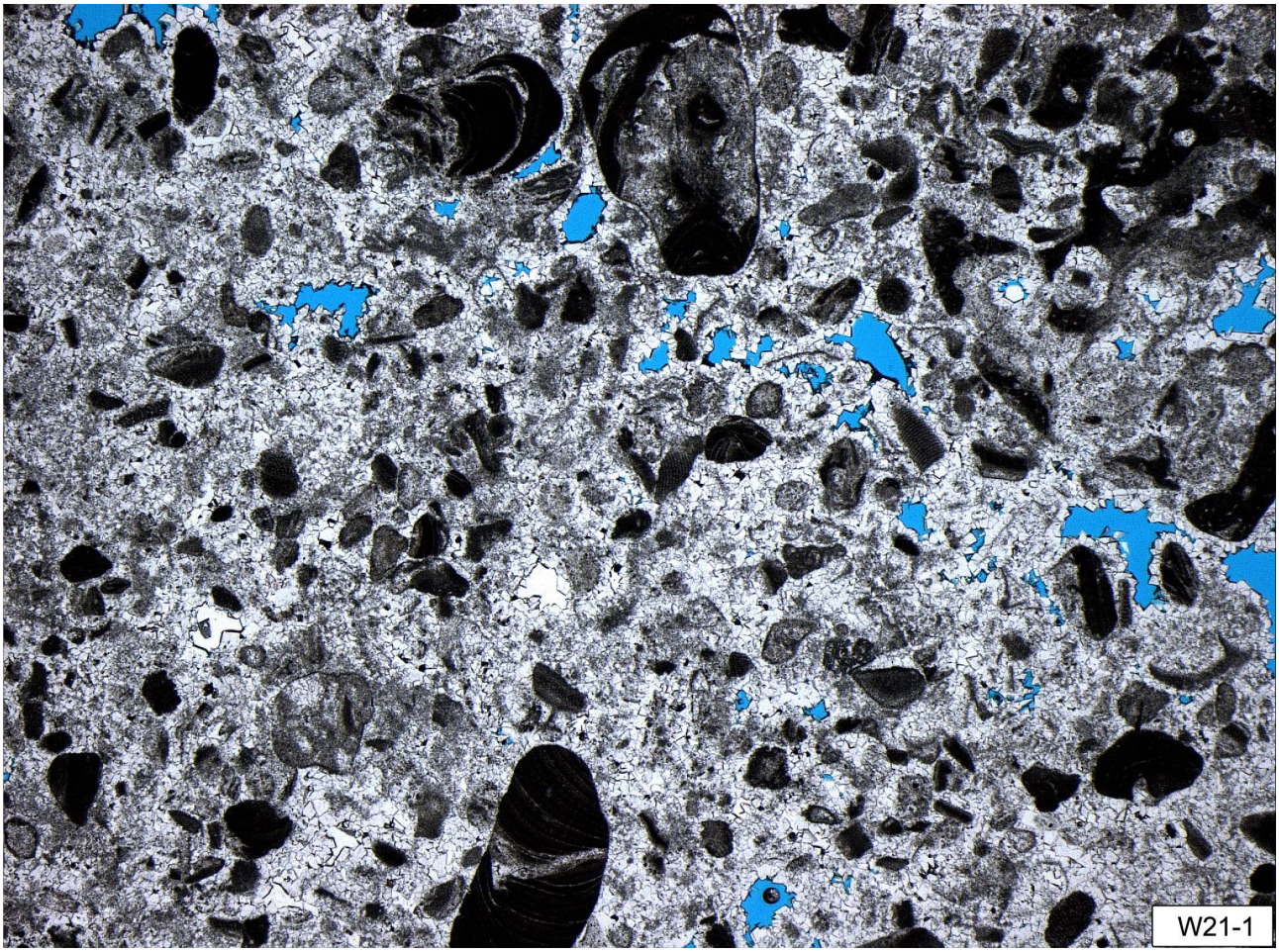

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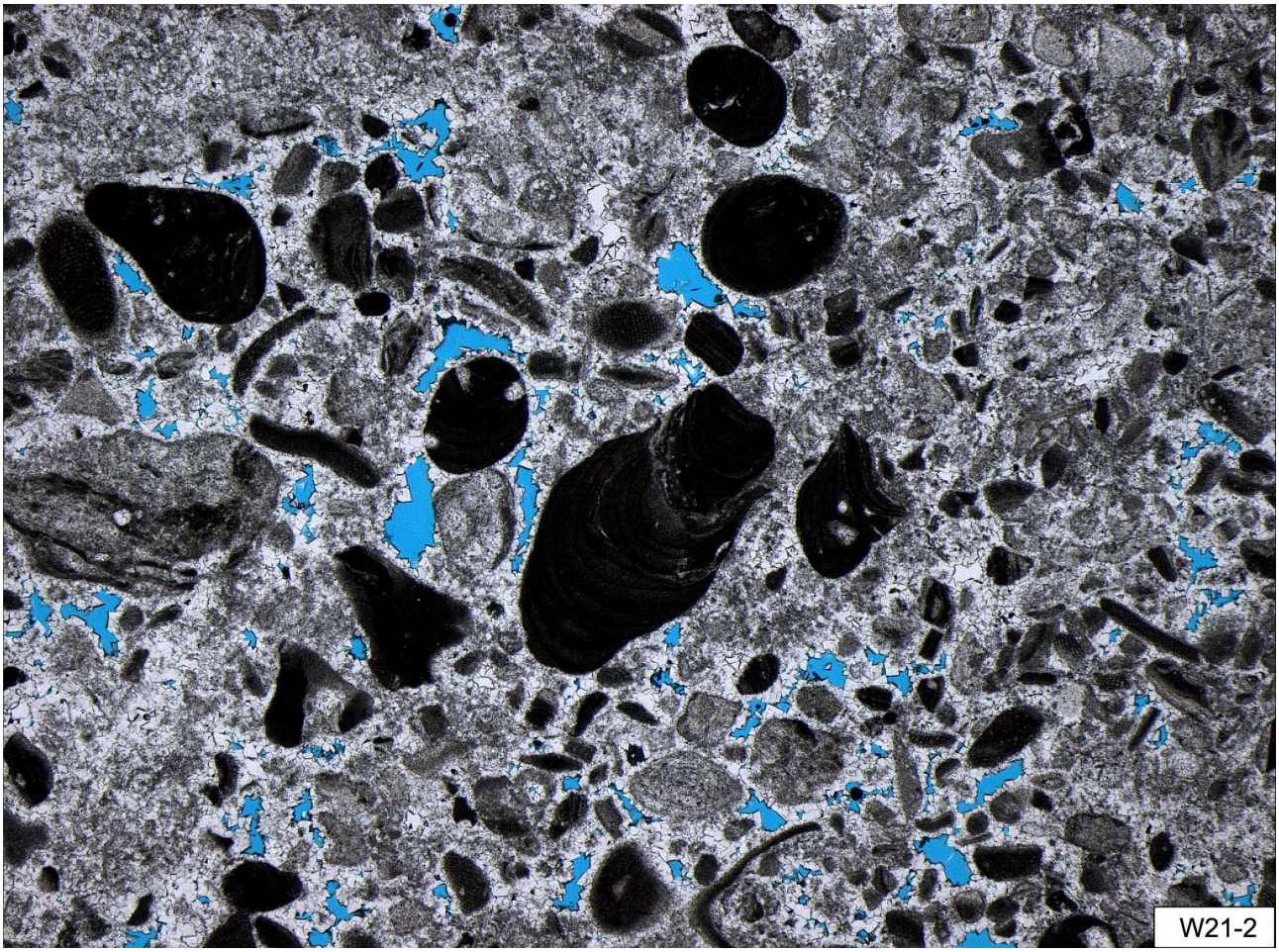

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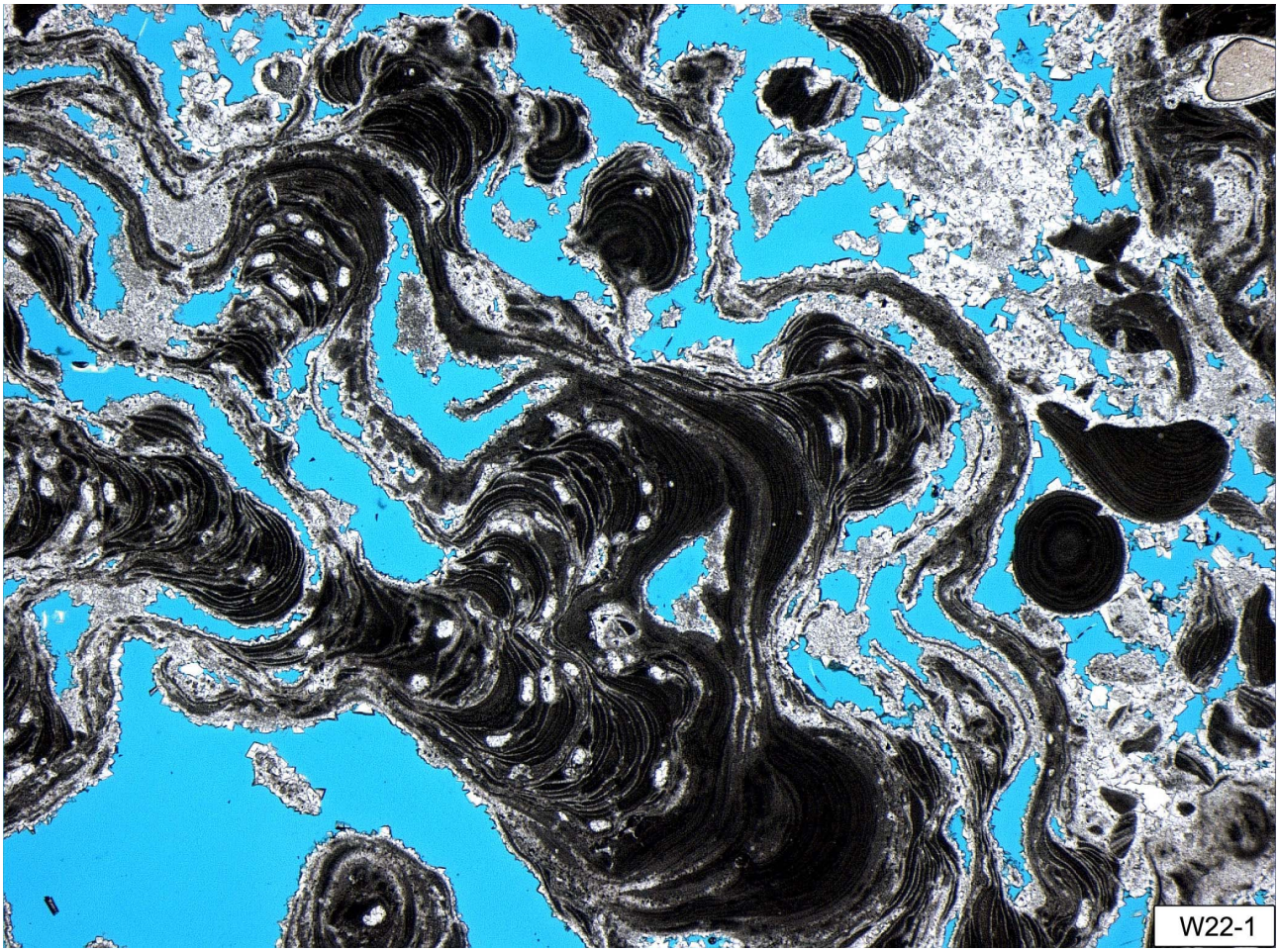

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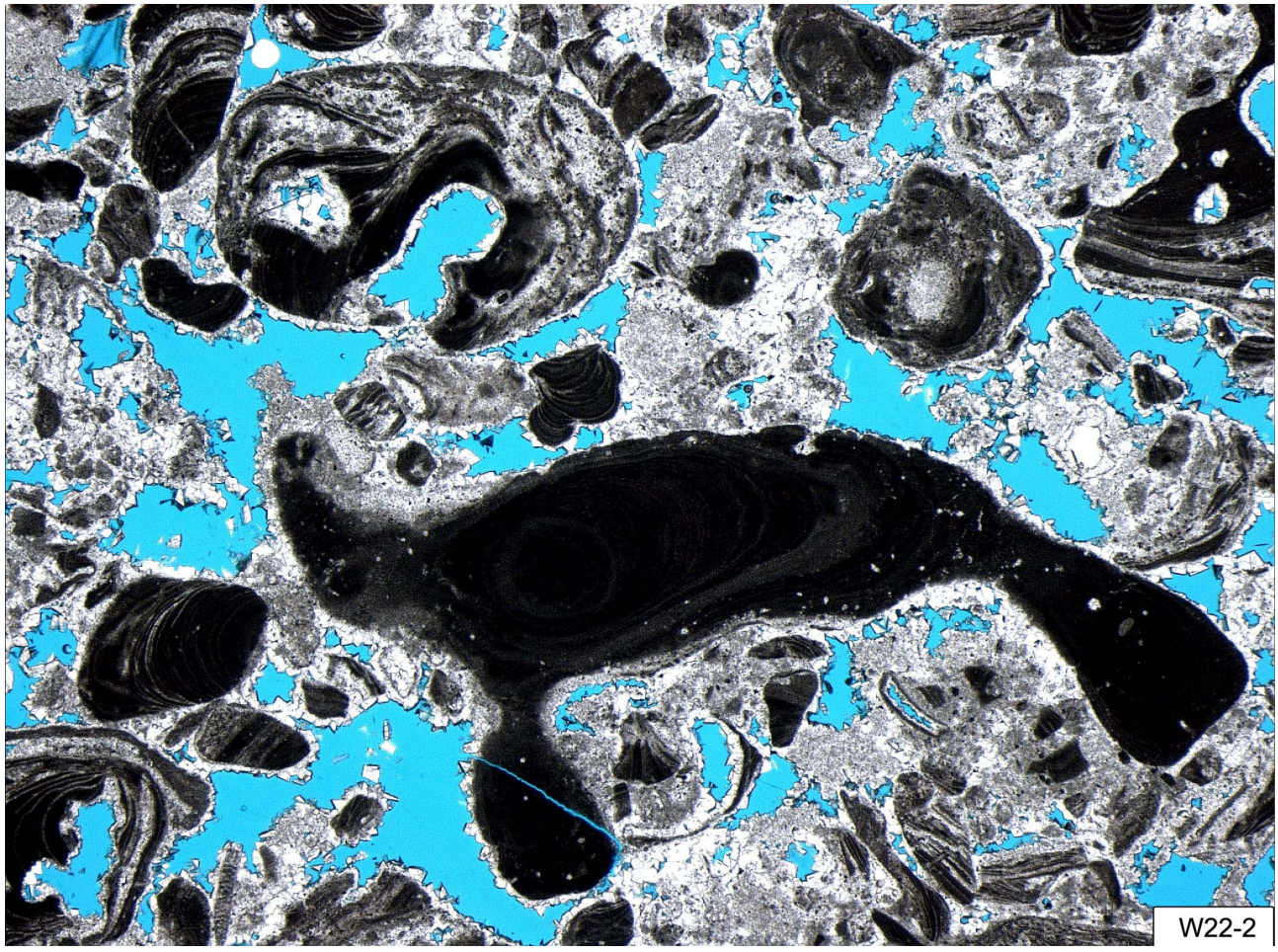

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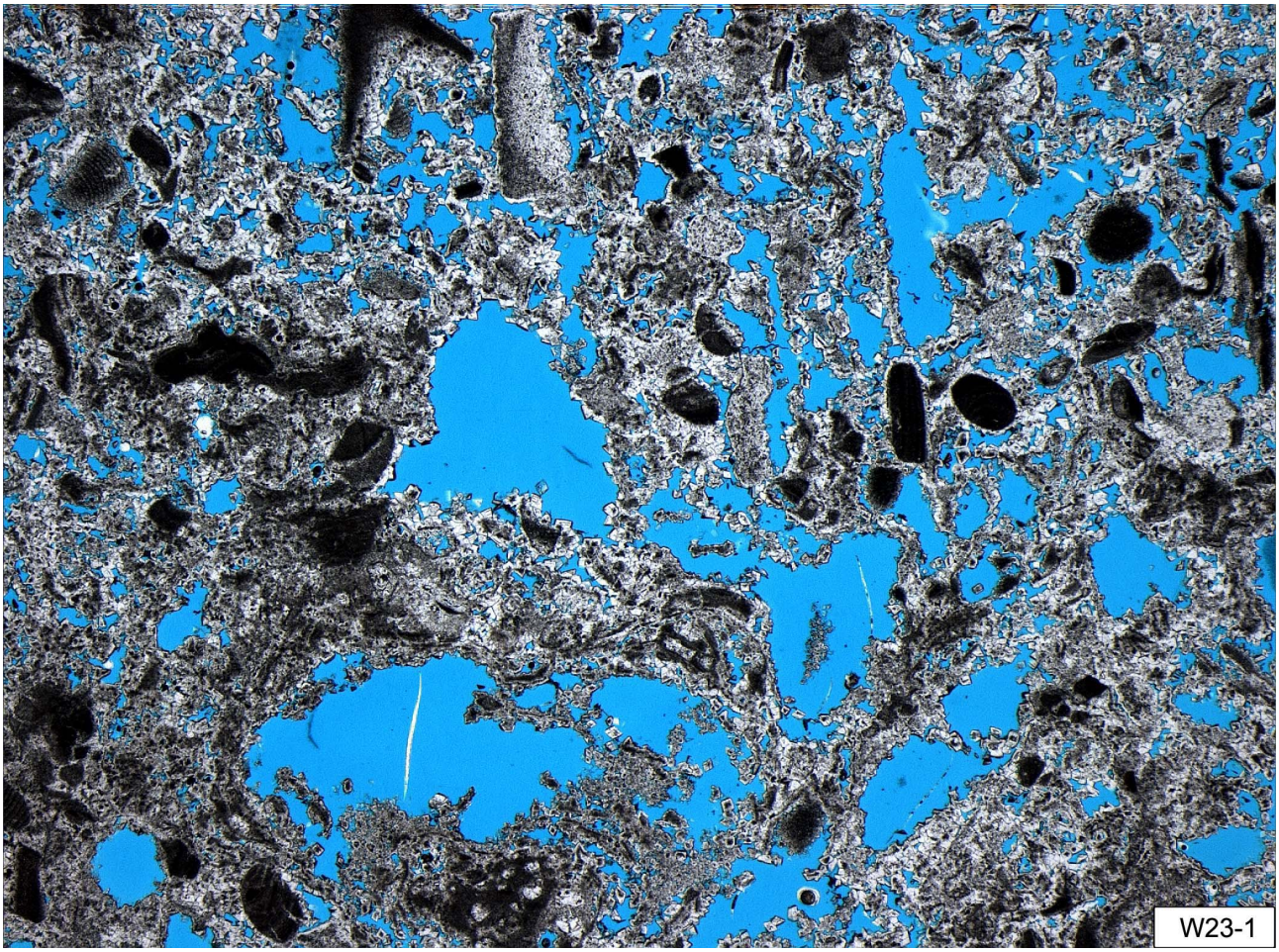

Plate AP2 (continued).